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* * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *
FILE 'HOME' ENTERED AT 11:48:35 ON 01 FEB 2005
=> file caba caplus embase japio lifesci medline scisearch uspatfull
=> s rojas mauricio/au
L1          38 ROJAS MAURICIO/AU
=> dup rem l1
PROCESSING COMPLETED FOR L1
L2          31 DUP REM L1 (7 DUPLICATES REMOVED)
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 31 ANSWERS - CONTINUE? Y/(N):y
L2   ANSWER 1 OF 31     MEDLINE on STN
AN   2005013057     IN-PROCESS
DN   PubMed ID: 15475380
TI   Endotoxin-induced lung injury in mice: structural, functional, and
     biochemical responses.
AU     ***Rojas Mauricio***  ; Woods Charles R; Mora Ana L; Xu Jianguo; Brigham
     Kenneth L
CS   Division of Pulmonary, Allergy and Critical Care, Center for Translational
     Research of the Lung, Emory University School of Medicine, Atlanta, GA
     30322, USA.. mrojas@emory.edu
NC   5 P01 HL-0669496-02 (NHLBI)
SO   American journal of physiology. Lung cellular and molecular physiology,
     (2005 Feb) 288 (2) L333-41.
     Journal code: 100901229. ISSN: 1040-0605.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   IN-PROCESS; NONINDEXED; Priority Journals
ED   Entered STN: 20050111
     Last Updated on STN: 20050126
AB   Acute lung injury is usually a complication of sepsis, and endotoxin
     treatment of mice is a frequently used experimental model.  To define this
     model and to clarify pathogenesis of the lung injury, we injected with 1
     mg/kg endotoxin ip and measured pulmonary function, pulmonary edema, serum
     concentrations of cytokines and growth factors, and lung histology over 48
     h.  During the first 6 h, tidal volume and minute volume increased and
     respiratory frequency decreased.  Serum concentrations of cytokines showed
     three patterns: 10 cytokines peaked at 2 h and declined rapidly, two
     peaked at 6 h and declined, and two had biphasic peaks at 2 and 24 h.
     Growth factors increased later and remained elevated longer.  Both
     collagen and fibronectin were deposited in the lungs beginning within
     hours of endotoxin and resolving over 48 h.  Histologically, lungs showed
     increased cellularity at 6 h with minimal persistent inflammation at 48 h.
     Lung water peaked at 6 h and gradually decreased over 48 h.  We conclude
     that intraperitoneal administration of endotoxin to mice causes a
     transient systemic inflammatory response and transient lung injury and
     dysfunction.  The response is characterized by successive waves of
     cytokine release into the circulation, early evidence of lung
     fibrogenesis, and prolonged increases in growth factors that may
     participate in lung repair.

L2   ANSWER 2 OF 31  USPATFULL on STN
AN     2004:63290  USPATFULL
TI     Cystic fibrosis transmembrane-conductance regulator (cftr)-membrane
       translocation sequence fusion protein (cftr-mts) as a therapeutic agent
IN     Stecenko, Arlene, Atlanta, GA, UNITED STATES
       Birgham, Kenneth, Atlanta, GA, UNITED STATES
           ***Rojas, Mauricio***  , Atlanta, GA, UNITED STATES
PI     US 2004047808      A1   20040311
AI     US 2003-416285     A1   20031020 (10)
       WO 2001-US49958         20011109
DT     Utility
FS     APPLICATION
LREP   NEEDLE & ROSENBERG, P.C., SUITE 1000, 999 PEACHTREE STREET, ATLANTA, GA,
       30309-3915
CLMN   Number of Claims: 8
ECL    Exemplary Claim: 1
DRWN   1 Drawing Page(s)
LN.CNT 510
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention provides a method of treating cystic fibrosis in a
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human subject diagnosed with cystic fibrosis, comprising administering to the subject, in a pharmaceutically acceptable carrier, an effective amount of a fusion protein, comprising a cystic fibrosis transmembrane conductance regulator (CFTR) and a membrane translocation sequence (MST), whereby the fusion protein can be taken up by affected cells in the subject, thereby treating cystic fibrosis. The present invention also provides a fusion protein comprising a cystic fibrosis transmembrane conductance regulator and a membrane translocation sequence.

L2 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
AN 2004:814996 CAPLUS
DN 141:348634
TI The Host Resistance Locus sst1 Controls Innate Immunity to Listeria monocytogenes Infection in Immunodeficient Mice
AU Boyartchuk, Victor; ***Rojas, Mauricio*** ; Yan, Bo-Shiun; Jobe, Ousman; Hurt, Nicholas; Dorfman, David M.; Higgins, Darren E.; Dietrich, William F.; Kramnik, Igor
CS Program in Gene Function and Expression, University of Massachusetts Medical School, Boston, MA, 02115, USA
SO Journal of Immunology (2004), 173(8), 5112-5120
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Epidemiol., clin., and exptl. approaches have convincingly demonstrated that host resistance to infection with intracellular pathogens is significantly influenced by genetic polymorphisms. Using a mouse model of infection with virulent Mycobacterium tuberculosis (MTB), we have previously identified the sst1 locus as a genetic determinant of host resistance to tuberculosis. In this study we demonstrate that susceptibility to another intracellular pathogen, Listeria monocytogenes, is also influenced by the sst1 locus. The contribution of sst1 to anti-listerial immunity is much greater in immunodeficient scid mice, indicating that this locus controls innate immunity and becomes particularly important when adaptive immunity is significantly depressed. Similar to our previous observations using infection with MTB, the resistant allele of sst1 prevents formation of necrotic infectious lesions in vivo. We have shown that macrophages obtained from sst1-resistant congenic mice possess superior ability to kill L. monocytogenes in vitro. The bactericidal effect of sst1 is dependent on IFN-.gamma. activation and reactive oxygen radical prodn. by activated macrophages after infection, but is independent of NO prodn. It is possible that there is a single gene that controls common IFN-dependent macrophage function, which is important in the pathogenesis of infections caused by both MTB and L. monocytogenes. However, host resistance to the two pathogens may be controlled by two different polymorphic genes encoded within the sst1 locus. The polymorphic gene(s) encoded within the sst1 locus that controls macrophage interactions with the two intracellular pathogens remains to be elucidated.
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 31 MEDLINE on STN
AN 2004244582 MEDLINE
DN PubMed ID: 15143481
TI Differential induction of apoptosis and necrosis in monocytes from patients with tuberculosis and healthy control subjects.
AU Gil Diana P; Leon Laura G; Correa Lucia I; Maya Jose R; Paris Sara C; Garcia Luis F; ***Rojas Mauricio***
CS Grupo de Inmunologia Celular e Inmunogenetica, Facultad de Medicina, Universidad de Antioquia, Medellin, Colombia.
SO Journal of infectious diseases, (2004 Jun 1) 189 (11) 2120-8.
Journal code: 0413675. ISSN: 0022-1899.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 200407
ED Entered STN: 20040515
Last Updated on STN: 20040723

Entered Medline: 20040722

AB BACKGROUND: Mycobacterium tuberculosis and purified protein derivative (PPD) induce apoptosis in murine macrophages and apoptosis and necrosis in human monocytes and alveolar epithelial cells. Macrophages from bronchoalveolar lavages and granulomas from patients with tuberculosis (TB) present both types of cell death; however, the significance of the type of cell death in TB remains uncertain. METHODS: Monocytes from PPD-positive control subjects and from patients with TB were exposed to PPD or M. tuberculosis. Apoptosis, necrosis, and the percentage of tumor necrosis factor (TNF)-alpha -positive and interleukin (IL)-10-positive cells were determined cytofluorometrically. Levels of lactate dehydrogenase, TNF-alpha, and IL-10 were measured in culture supernatants. The role of TNF-alpha and IL-10 was tested by blockade experiments. RESULTS: PPD and M. tuberculosis induced apoptosis in monocytes from PPD-positive control subjects, whereas cells from patients with TB presented apoptosis and necrosis. Cells from PPD-positive control subjects produced mainly TNF-alpha, whereas cells from patients with TB produced mainly IL-10. Blockade experiments suggest that TNF-alpha and IL-10 regulate the type of cell death occurring in response to M. tuberculosis. CONCLUSIONS: Results suggest that apoptosis of monocytes exposed to mycobacteria may partly explain the protective immune response found in PPD-positive control subjects, whereas necrosis may be determinant of the bacterial dissemination and tissue damage that occur in patients with active TB.

L2 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
AN 2003:603564 CAPLUS
DN 139:336786
TI Structure and Function of CD72 in the Non-obese Diabetic (NOD) Mouse
AU Rojas, Andres; Xu, Fingping; ***Rojas, Mauricio*** ; Thomas, James W.
CS Departments of Medicine, Microbiology and Immunology, Vanderbilt University Medical Center, Nashville, TN, 37232-2681, USA
SO Autoimmunity (2003), 36(4), 233-239
CODEN: AUIMEI; ISSN: 0891-6934
PB Taylor & Francis Ltd.
DT Journal
LA English
AB Type I or insulin dependent diabetes mellitus develops in the non-obese diabetic (NOD) mouse as a consequence of T cell mediated autoimmune attack on pancreatic beta cells. B lymphocytes are required for disease progression in NOD and loss of tolerance in the B cell compartment is one of the earliest manifestation of the autoimmune process. To understand how the fate and function of B lymphocytes may be regulated in the context of an organ specific autoimmune disease, the B cell co-receptor CD72 (Lyb-2) was examd. in NOD mice. Mab that recognize a,b, and d alleles of CD72 reacted poorly with NOD B cells while western blots of B cell exts. show that CD72 is abundant in NOD B cells. Nucleotide sequencing of CD72 cDNA confirms that an uncommon allele, CD72c, is expressed in NOD. Functional studies using monoclonal antibodies indicate that the CD72c allele of NOD can serve as a pos. regulator of B cell responses both as a single signal and in synergy with BCR or IL-4 stimulation. Since CD72c differs principally in the extra cellular or ligand binding portion of the mol., interactions with its natural ligand in vivo may contribute to functional differences in mouse strains that express this allele. NOD and lupus prone strains share the CD72c allele and its functions may contribute to overlapping features of organ specific and systemic autoimmune disorders.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
AN 2003:564026 CAPLUS
DN 139:390755
TI Modulation of macrophage apoptosis by antimycobacterial therapy: physiological role of apoptosis in the control of Mycobacterium tuberculosis
AU Gil, Diana; Garcia, Luis F.; ***Rojas, Mauricio***
CS Facultad de Medicina, Grupo de Inmunologia Celular e Inmunogenetica, Universidad de Antioquia, Medellin, Colombia
SO Toxicology and Applied Pharmacology (2003), 190(2), 111-119
CODEN: TXAPA9; ISSN: 0041-008X

PB Elsevier Science
DT Journal
LA English
AB Apoptosis is a form of cell death that avoids inflammatory responses. We had previously reported that Mycobacterium tuberculosis (Mtb) and Purified Protein Deriv. (PPD) induce apoptosis in murine macrophages. The prodn. of TNF.alpha. and IL-10 in response to Mtb infection modulates apoptosis by controlling nitric oxide prodn. and caspase activation. Furthermore, Mtb triggers calcium influx responsible for mitochondrial alterations, an early pathway of apoptosis, independently of TNF.alpha. and IL-10. In tuberculosis patients apoptotic macrophages are found in granulomas and bronchoalveolar lavages, suggesting that apoptosis may participate in the control of Mtb. To further explore the role of macrophage apoptosis in tuberculosis, we studied the capacity of std. antimycobacterial drugs to modulate different events assocd. with the induction of apoptosis. The B10R murine macrophage line was infected or not with Mtb (5:1 bacteria to macrophage ratio) or exposed to PPD (10 .mu.g/mL), in the presence or absence of varying concns. (1-20 .mu.g/mL) of anti mycobacterial drugs (isoniazid, rifampin, thiacetazone, streptomycin, and ethambutol). Inhibition of the intracellular growth of M. tuberculosis by all drugs studied/correlated with inhibition of permeability transition (PT) alterations; TNF.alpha., IL-10, and nitric oxide prodn., and caspase-1 activation. However, these drugs did not affect PPD-induced apoptosis or its assocd. events, suggesting that the ability of antimycobacterial drugs to block macrophage apoptosis could be explained by their effects on the metabolic activities of Mtb. All drugs, except isoniazid, at higher concns., induced PT alterations in noninfected macrophages in a way that appears to be dependent on calcium, since a calcium chelator prevented it. The results presented herein suggest that the pharmacol. manipulation of pathways assocd. with macrophage apoptosis may affect the intracellular growth of Mtb.
RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 31 USPATFULL on STN
AN 2002:259566 USPATFULL
TI Sequence and method for genetic engineering of proteins with cell membrane translocating activity
IN Lin, Yao-Zhong, Nashville, TN, UNITED STATES
Donahue, John P., Nashville, TN, UNITED STATES
Rojas, Mauricio , Nashville, TN, UNITED STATES
Tan, ZhongJia, Nashville, TN, UNITED STATES
PA Vanderbilt University (U.S. corporation)
PI US 2002143142 A1 20021003
US 6780843 B2 20040824
AI US 2002-116288 A1 20020404 (10)
RLI Division of Ser. No. US 2000-562868, filed on 1 May 2000, PENDING
Division of Ser. No. US 1998-186170, filed on 4 Nov 1998, GRANTED, Pat. No. US 6248558
PRAI US 1998-80083P 19980331 (60)
DT Utility
FS APPLICATION
LREP NEEDLE & ROSENBERG P C, 127 PEACHTREE STREET N E, ATLANTA, GA, 30303-1811
CLMN Number of Claims: 73
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 1586
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention describes a membrane-translocating peptide sequence (MTS) which facilitates entry of polypeptides and proteins into cells. Also described is an isolated nucleotide sequence encoding the membrane-translocating peptide and a method of using this sequence to genetically engineer proteins with cell membrane permeability. The MTS, and the method of genetically engineering proteins with cell membrane permeability, are useful for polypeptide and protein delivery for human and veterinary applications such as vaccine delivery and cancer therapy.

L2 ANSWER 8 OF 31 USPATFULL on STN
AN 2002:201877 USPATFULL
TI Sequence and method for genetic engineering of proteins with cell

membrane translocating activity
IN Lin, Yao-Zhong, Nashville, TN, United States
Donahue, John P., Nashville, TN, United States
Rojas, Mauricio , Nashville, TN, United States
Tan, ZhongJia, Nashville, TN, United States
PA Vanderbilt University, Nashville, TN, United States (U.S. corporation)
PI US 6432680 B1 20020813
AI US 2000-562868 20000501 (9)
RLI Division of Ser. No. US 1998-186170, filed on 4 Nov 1998, now patented, Pat. No. US 6248558
PRAI US 1998-80083P 19980331 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Kam, Chih-Min
LREP Needle & Rosenberg, P.C.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1419
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention describes a membrane-translocating peptide sequence (MTS) which facilitates entry of polypeptides and proteins into cells. Also described is an isolated nucleotide sequence encoding the membrane-translocating peptide and a method of using this sequence to genetically engineer proteins with cell membrane permeability. The MTS, and the method of genetically engineering proteins with cell membrane permeability, are useful for polypeptide and protein delivery for human and veterinary applications such as vaccine delivery and cancer therapy.

L2 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4
AN 2002:512290 CAPLUS
DN 138:37469
TI Mycobacterial lipoarabinomannans: modulators of dendritic cell function and the apoptotic response
AU Nigou, Jerome; Gilleron, Martine; ***Rojas, Mauricio*** ; Garcia, Luis F.; Thurnher, Martin; Puzo, Germain
CS Institut de Pharmacologie et de Biologie Structurale, CNRS, Toulouse, 31077, Fr.
SO Microbes and Infection (2002), 4(9), 945-953
CODEN: MCINFS; ISSN: 1286-4579
PB Editions Scientifiques et Medicales Elsevier
DT Journal; General Review
LA English
AB A review. The mol. bases of Mycobacterium tuberculosis pathogenicity remain unclear. The authors report here how M. Tuberculosis mannosylated lipoarabinomannans contribute to the survival of bacilli in the human reservoir by (i) inhibiting IL-12 prodn. by macrophages and dendritic cells and (ii) modulating M. Tuberculosis-induced macrophage apoptosis.
RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5
AN 2002:303338 CAPLUS
DN 137:288700
TI Differential modulation of apoptosis and necrosis by antioxidants in immunosuppressed human lymphocytes
AU ***Rojas, Mauricio*** ; Rugeles, Maria Teresa; Gil, Diana Patricia; Patino, Pablo
CS Grupo de Inmunologia Celular e Inmunogenetica, Laboratorio Central de Investigaciones, Universidad de Antioquia, Medellin, Colombia
SO Toxicology and Applied Pharmacology (2002), 180(2), 67-73
CODEN: TXAPA9; ISSN: 0041-008X
PB Elsevier Science
DT Journal
LA English
AB In the present study, the authors explored whether mitogenic stimulation of dexamethasone (DXM)- and cyclosporine A (CsA)-immunosuppressed peripheral blood lymphocytes (PBML) induced apoptosis or necrosis and their relation with the prodn. of reactive oxygen intermediates. The authors' results indicate that both phenomena can occur in these cells and

that antioxidants such as N-acetyl Cys (NAC) and ascorbic acid (AA) can modulate them. However, DXM-induced apoptosis was only partially inhibited by NAC and AA, suggesting that DXM-treated PBMC had an addnl. apoptotic pathway independent of ROIs. Furthermore, the authors obsd. that the inhibition of apoptosis by antioxidants correlated with an increased cell proliferation, suggesting that the immunomodulation of both DXM and CsA may be related to induction of apoptosis. The ability to differentially modulate apoptosis and necrosis by antioxidants opens new possibilities in the management of immunosuppressive therapy, since the inhibition of necrosis may avoid inflammation and the tissue damage assocd. with immunosupressors.

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 6
AN 2002:843818 CAPLUS
DN 138:54470
TI Activation of JAK2/STAT1-.alpha.-dependent signaling events during Mycobacterium tuberculosis-induced macrophage apoptosis
AU ***Rojas, Mauricio*** ; Olivier, Martin; Garcia, Luis F.
CS Grupo de Inmunologia Celular e Inmunogenetica, Facultad de Medicina, Universidad de Antioquia, Medellin, Colombia
SO Cellular Immunology (2002), 217(1/2), 58-66
CODEN: CLIMB8; ISSN: 0008-8749
PB Elsevier Science
DT Journal
LA English
AB Induction of apoptosis by Mycobacterium tuberculosis in murine macrophage involves TNF-.alpha. and nitric oxide (NO) prodn. and caspase cascade activation; however, the intracellular signaling pathways implicated remain to be established. The authors' results indicate that infection of the B10R murine macrophage line with M. tuberculosis induces apoptosis independent of mycobacterial phagocytosis and that M. tuberculosis induces protein tyrosine kinase (PTK) activity, JAK2/STAT1-.alpha. phosphorylation, and STAT1-.alpha. nuclear translocation. Inhibitors of PTK (AG-126), or JAK2 (AG-490) inhibited TNF-.alpha. and NO prodn., caspase 1 activation and apoptosis, suggesting that M. tuberculosis-induction of these events depends on JAK2/STAT1-.alpha. activation. In addn., the authors have obtained evidence that ManLAM capacity to inhibit M. tuberculosis-induced apoptosis involves the activation of the PTP SHP-1. The finding that M. tuberculosis infection activate JAK2/STAT1-.alpha. pathway suggests that M. tuberculosis might mimic macrophage-activating stimuli.

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 12 OF 31 USPATFULL on STN
AN 2001:93325 USPATFULL
TI Sequence and method for genetic engineering of proteins with cell membrane translocating activity
IN Lin, Yao-Zhong, Nashville, TN, United States
Donahue, John P., Nashville, TN, United States
Rojas, Mauricio , Nashville, TN, United States
Tan, Zhong-Jia, Nashville, TN, United States
PA Vanderbilt University, Nashville, TN, United States (U.S. corporation)
PI US 6248558 B1 20010619
AI US 1998-186170 19981104 (9)
PRAI US 1998-80083P 19980331 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Carlson, Karen Cochrane; Assistant Examiner: Srivastava, Devesh
LREP Needle & Rosenberg, P.C.
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1376
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention describes a membrane-translocating peptide sequence (MTS) which facilitates entry of polypeptides and proteins into cells. Also described is an isolated nucleotide sequence encoding the

membrane-translocating peptide and a method of using this sequence to genetically engineer proteins with cell membrane permeability. The MTS, and the method of genetically engineering proteins with cell membrane permeability, are useful for polypeptide and protein delivery for human and veterinary applications such as vaccine delivery and cancer therapy.

L2 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:832547 CAPLUS
DN 136:117228
TI Cutting edge: B cell specificity contributes to the outcome of diabetes in nonobese diabetic mice
AU Hulbert, Chrys; Riseili, Brent; ***Rojas, Mauricio*** ; Thomas, James W.
CS Departments of Medicine, Microbiology and Immunology, Vanderbilt University, Nashville, TN, 37232, USA
SO Journal of Immunology (2001), 167(10), 5535-5538
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Type I diabetes mellitus (TIDM) is an autoimmune disorder characterized by T cell-mediated destruction of insulin-producing .beta. cells in the pancreas. In the nonobese diabetic (NOD) model of TIDM, insulitis and diabetes are dependent on the presence of B lymphocytes; however, the requirement for specificity within the B cell repertoire is not known. To det. the role of antigen-specific B cells in TIDM, VH genes with different potential for insulin binding were introduced into NOD as H chain transgenes. VH125 H chain combines with endogenous L chains to produce a repertoire in which 1-3% of mature B cells are insulin specific, and these mice develop accelerated diabetes. In contrast, NOD mice harboring a similar transgene, VH281, with limited insulin binding develop insulitis but are protected from TIDM. Thus, antigen-specific components in the B cell repertoire may alter the course of TIDM.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:167084 CAPLUS
DN 134:325153
TI Anergy and not clonal ignorance determines the fate of B cells that recognize a physiological autoantigen
AU ***Rojas, Mauricio*** ; Hulbert, Chrys; Thomas, James W.
CS Department of Medicine, Division of Rheumatology and Immunology, Vanderbilt University, Nashville, TN, 37232, USA
SO Journal of Immunology (2001), 166(5), 3194-3200
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Autoantibodies to insulin arise spontaneously in the insulin autoimmune syndrome and in type I diabetes. In addn., administration of insulin to individuals without autoimmune disease routinely results in Abs that bind autologous hormone. These observations and findings in transgenic models of tolerance led to an inference that physiol. levels of hormones and growth factors, such as insulin, are not sufficient to induce tolerance in B cells, a state termed clonal ignorance. In contrast, the authors have discovered that virtually all conventional B cells expressing a low affinity anti-insulin transgene interact with endogenous insulin and are effectively silenced for Ig prodn. and for T cell-dependent immune responses. A fraction of transgenic B cells escapes silencing and functions autonomously to produce insulin Abs that may lower fasting blood sugars similar to an insulin autoimmune syndrome. These B cells have characteristics of a B1-like subset and are depleted by hypotonic peritoneal lysis. These findings question the concept of clonal ignorance and show that physiol. concns. of Ag may effectively silence conventional B cells even when the affinity for autoantigen is low. Self-reactivity may arise in the repertoire because of compartmental differences that govern the fate of B cells and not as a result of true clonal ignorance.
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:588350 CAPLUS
DN 134:146340
TI Mannosylated lipoarabinomannan antagonizes Mycobacterium tuberculosis-induced macrophage apoptosis by altering Ca+2-dependent cell signaling
AU ***Rojas, Mauricio*** ; Garcia, Luis F.; Nigou, Jerome; Puzo, Germain; Olivier, Martin
CS Grupo de Inmunologia Celular e Inmunogenetica. Laboratorio Central de Investigaciones, Centro de Investigaciones Medicas, Facultad de Medicina. Universidad de Antioquia, Medellin, AA 1226, Colombia
SO Journal of Infectious Diseases (2000), 182(1), 240-251
CODEN: JIDIAQ; ISSN: 0022-1899
PB University of Chicago Press
DT Journal
LA English
AB Mycobacterium tuberculosis-induced macrophage apoptosis can be inhibited by mannosylated lipoarabinomannan (ManLAM), although it induces tumor necrosis factor (TNF)-.alpha. and NO prodn., which participate in apoptosis induction. ManLAM also modulates Ca+2-dependent intracellular events, and Ca+2 participates in apoptosis in different systems. Ca+2 was assessed for involvement in M. tuberculosis-induced macrophage apoptosis and for modulation by ManLAM. The role of Ca+2 was supported by the blockade of apoptosis by cAMP inhibitors and the Ca+2 chelator, BAPTA/AM. These agents also inhibited caspase-1 activation and cAMP-responsive element-binding protein translocation without affecting TNF-.alpha. prodn. Infection of macrophages with M. tuberculosis induced an influx of Ca+2 that was prevented by ManLAM. Similarly, M. tuberculosis infection-altered mitochondrial permeability transition was prevented by ManLAM and BAPTA/AM. Finally, ManLAM and BAPTA/AM reversed the effects of M. tuberculosis on p53 and Bcl-2 expression. ManLAM counteracts the alterations of calcium-dependent intracellular events that occur during M. tuberculosis-induced macrophage apoptosis.
RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:640717 CAPLUS
DN 131:267937
TI Membrane-translocating peptide MTS and method for genetic engineering of proteins with cell membrane translocating activity
IN Lin, Yao-zhong; Donahue, John P.; ***Rojas, Mauricio*** ; Tan, Zhong Jia
PA Vanderbilt University, USA
SO PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9949879	A1	19991007	WO 1999-US7189	19990331
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6248558	B1	20010619	US 1998-186170	19981104
	AU 9934628	A1	19991018	AU 1999-34628	19990331
	EP 1067949	A1	20010117	EP 1999-916273	19990331
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6432680	B1	20020813	US 2000-562868	20000501
	US 2002143142	A1	20021003	US 2002-116288	20020404
	US 6780843	B2	20040824		
PRAI	US 1998-80083P	P	19980331		
	US 1998-186170	A	19981104		
	WO 1999-US7189	W	19990331		
	US 2000-562868	A3	20000501		

AB The invention describes a membrane-translocating peptide sequence (MTS) which facilitates entry of polypeptides and proteins into cells. Also described is an isolated nucleotide sequence encoding the membrane-translocating peptide and a method of using this sequence to

genetically engineer proteins with cell membrane permeability. The MTS, and the method of genetically engineering proteins with cell membrane permeability, are useful for polypeptide and protein delivery for human and veterinary applications such as vaccine delivery and cancer therapy.

L2 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:329699 CAPLUS
DN 131:115185
TI TNF-.alpha. and IL-10 modulate the induction of apoptosis by virulent Mycobacterium tuberculosis in murine macrophages
AU ***Rojas, Mauricio*** ; Olivier, Martin; Gros, Philippe; Barrera, Luis F.; Garcia, Luis F.
CS Grupo de Inmunologia Celular e Inmunogenetica, Laboratorio Central de Investigaciones, Centro de Investigaciones Medicas, Facultad de Medicina, Universidad de Antioquia, Medellin, Colombia
SO Journal of Immunology (1999), 162(10), 6122-6131
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB The Bcg/Nramp1 gene controls early resistance and susceptibility of macrophages to mycobacterial infections. The authors previously reported that M. tuberculosis-infected (Mtb) B10R (Bcgr) and B10S (Bcgs) macrophages differentially produce nitric oxide (NO-), leading to macrophage apoptosis. Since TNF-.alpha. and IL-10 have opposite effects on many macrophage functions, the authors detd. the no. of cells producing TNF-.alpha. and IL-10 in Mtb-infected or purified protein deriv.-stimulated B10R and B10S macrophages lines, and Nramp1+/+ and Nramp1-/- peritoneal macrophages and correlated them with Mtb-mediated apoptosis. Mtb infection and purified protein deriv. treatment induced more TNF-.alpha.+Nramp1+/+ and B10R, and more IL-10+Nramp1-/- and B10S cells. Treatment with mannosylated lipoarabinomannan, which rescues macrophages from Mtb-induced apoptosis, augmented the no. of IL-10 B10R+ cells. Anti-TNF-.alpha. inhibited apoptosis, diminished NO- prodn., p53, and caspase 1 activation and increased Bcl-2 expression. In contrast, anti-IL-10 increased caspase 1 activation, p53 expression, and apoptosis, although there was no increment in NO- prodn. Murine rTNF-.alpha. induced apoptosis in noninfected B10R and B10S macrophages that was reversed by murine rIL-10 in a dose-dependent manner with concomitant inhibition of NO- prodn. and caspase 1 activation. NO- and caspase 1 seem to be independently activated in that aminoguanidine did not affect caspase 1 activation and the inhibitor of caspase 1, Tyr-Val-Ala-Asp-acylooxymethylketone, did not block NO- prodn.; however, both treatments inhibited apoptosis. Thus, Mtb activates TNF-.alpha.- and IL-10-dependent opposite signals in the induction of macrophage apoptosis and the TNF-.alpha./IL-10 ratio is controlled by the Nramp1 background of resistance/susceptibility and may account for the balance between apoptosis and macrophage survival.
RE.CNT 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:396728 CAPLUS
DN 131:209296
TI Application of cell-permeable peptides to the functional analysis of EGF-induced mitogenic signaling pathways
AU ***Rojas, Mauricio*** ; Yao, SongYi; Donahue, John P.; Lin, Yao-Zhong
CS Department of Microbiology and Immunology, Vanderbilt University, Nashville, TN, 37232, USA
SO Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 733-734. Editor(s): Tam, James P.; Kaumaya, Pravin T. P. Publisher: Kluwer, Dordrecht, Neth.
CODEN: 67UCAR
DT Conference
LA English
AB To det. the functional consequence of disrupting the EGFR/Grb2 or Shc/Grb2 protein-protein assocns. in vivo, the authors delivered peptides contg. either the EGFR Tyr1068 or the Shc Tyr 317-contg. region into intact cells using a nondestructive cell-permeable peptide import method. To influence EGF-induced EGFR/Grb2 interaction, the authors designed a peptide

comprised of a cell permeable sequence at its N-terminus (underlined) and the phosphotyrosine 1068-contg. site of EGFR at its C-terminus, AAVALLPAVLLALLAPLPVPEpYINQSV (SP1068 peptide). In EGF-stimulated SAA cells (NIH 3T3 cells overexpressing EGFR), the phosphorylated EGFR was copptd. with Grb2. However, the amt. of assocd. EGFR was significantly reduced in cells pretreated with SP1068 peptide. Neither non-cell permeable P1068 nor cell-permeable unphosphorylated SY1068 peptide treatment showed any significant inhibition. Peptide-mediated disruption of the EGFR/Grb2/Sos-1 cascade led to reduced Ras activation and MAP kinase activation in EGF-stimulated cells. The authors also delivered cell-permeable peptides carrying Shc Tyr317-contg. region into SAA cells, AAVALLPAVLLALLAPFDDPSYVNVQNL. The EGF-induced Shc/Grb2 assocn. was inhibited substantially in the cells treated with phosphorylated SP317 peptide. Interestingly, this assocn. was also inhibited by unphosphorylated SY317 peptide. In contrast, the non-cell-permeable Shc peptide (P317) and cell-permeable SY1068 peptide were without significant effect. To verify that the Grb2-binding activities of non-phosphorylated SY317 peptide do not result from in vivo phosphorylation of the peptide, the authors used an in vitro peptide-protein binding assay. Results showed that Grb2 SH2 protein could bind both phosphorylated and unphosphorylated Shc peptides, but not an unphosphorylated SY1068 peptide derived from the EGFR. This finding represents the first paradigm of the functional interaction between an unphosphorylated tyrosine-contg. motif and an SH2 domain.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:420791 CAPLUS
DN 129:147988
TI Induction of apoptosis in murine macrophages by Mycobacterium tuberculosis is reactive oxygen intermediates-independent
AU ***Rojas, Mauricio*** ; Barrera, Luis F.; Garcia, Luis F.
CS Grupo de Inmunologia Celular e Inmunogenetica, Laboratorio Central de Investigaciones, Facultad de Medicina, Universidad de Antioquia, Medellin, Colombia
SO Biochemical and Biophysical Research Communications (1998), 247(2), 436-442
CODEN: BBRCA9; ISSN: 0006-291X
PB Academic Press
DT Journal
LA English
AB Infection with M. tuberculosis induces apoptosis in murine macrophage lines. Resistant macrophages B10R (Bcgr) are more prone to undergo apoptosis than susceptible B10S (Bcgs) macrophages. Apoptosis and inhibition of intracellular growth of the mycobacteria seem to be dependent on the prodn. of nitric oxide, since both can be reverted by aminoguanidine (AMG). Although B10R macrophages produce more superoxide anion than B10S macrophages after infection with M. tuberculosis, reactive oxygen intermediate (ROIs) scavengers did not affect uptake of 3H-uracil incorporation by the mycobacteria nor the induction of apoptosis. These results further suggest that both phenomena are dependent on the prodn. of nitric oxide by the infected macrophages. (c) 1998 Academic Press.

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:240574 CAPLUS
DN 129:24701
TI Genetic engineering of proteins with cell membrane permeability
AU ***Rojas, Mauricio*** ; Donahue, John P.; Tan, Zhongjia; Lin, Yao-Zhong
CS Department of Microbiology and Immunology, Vanderbilt Univ., Nashville, TN, 37232, USA
SO Nature Biotechnology (1998), 16(4), 370-375
CODEN: NABIF9; ISSN: 1087-0156
PB Nature America
DT Journal
LA English
AB The discovery of methods for generating proteins with inherent cell membrane-translocating activity will expand our ability to study and manipulate various intracellular processes in living systems. We report a

method to engineer proteins with cell-membrane permeability. After a 12-amino acid residue membrane-translocating sequence (MTS) was fused to the C-terminus of glutathione S-transferase (GST), the resultant GST-MTS fusion proteins were efficiently imported into NIH 3T3 fibroblasts and other cells. MTS has the amino acid sequence AAVLLPVLLAAP. To explore the applicability of this nondestructive important method to the study of intracellular processes, a 41-kDa GST-Grb2SH2-MTS fusion protein contg. the Grb2 SH2 domain was tested for its effect on the epidermal growth factor (EGF)-stimulated signaling pathway. This fusion protein entered cells, formed a complex with phosphorylated EGF receptor (EGFR), and inhibited EGF-induced EGFR-Grb2 assocn. and mitogen-activated protein kinase activation.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:133304 CAPLUS
DN 128:291642
TI Conformational and topological requirements of cell-permeable peptide function
AU Du, Caigan; Yao, Songyi; ***Rojas, Mauricio*** ; Lin, Yao-Zhong
CS Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN, USA
SO Journal of Peptide Research (1998), 51(3), 235-243
CODEN: JPERFA; ISSN: 1397-002X
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB Cell-permeable peptide import recently was developed to deliver synthetic peptides into living cells for studying intracellular protein functions. This import process is mediated by an N-terminal carrier sequence which is the hydrophobic region of a signal peptide. In this study, the conformational consequence of the interaction of cell-permeable peptides with different mimetic membrane environments was investigated by CD anal. We showed that cell-permeable peptides adopted .alpha.-helical structures in sodium dodecyl sulfate (SDS) micelles or aq. trifluoroethanol (TFE). The potency of these peptides in forming helical structures is higher in an amphiphilic environment (SDS) than in a hydrophobic environment (TFE), suggesting that some hydrophilic mols. assocd. with the cell membrane may be involved in peptide import. We also studied topol. requirements of cell-permeable peptide function. We demonstrated that peptides contg. the carrier sequence in their C-termini can also be imported into cells efficiently. This important discovery can avoid repetitious synthesis of the membrane-translocating sequence for peptides with different functional cargoes and is potentially useful for developing a cell-permeable peptide library. Finally, we showed that, when a retro version of the carrier sequence was used, the peptide lost its translocating ability despite retaining a high content of .alpha.-helical structure in mimetic membrane environments. This suggests that the propensity of peptides to adopt a helical conformation is required but not sufficient for cellular import and that other structural factors such as the side-chain topol. of the carrier sequence are also important. Our studies together contribute to the more rational design of useful cell-permeable peptides.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:777924 CAPLUS
DN 128:60644
TI Inhibition of virulent Mycobacterium tuberculosis by Bcgr and Bcgs macrophages correlates with nitric oxide production
AU Arias, Mauricio; ***Rojas, Mauricio*** ; Zabaleta, Jovanny; Rodriguez, Jaime I.; Paris, Sara C.; Barrera, Luis F.; Garcia, Luis F.
CS Laboratorio Central de Investigaciones, Facultad de Medicina, Universidad de Antioquia, Medellin, Colombia
SO Journal of Infectious Diseases (1997), 176(6), 1552-1558
CODEN: JIDIAQ; ISSN: 0022-1899
PB University of Chicago Press
DT Journal
LA English
AB The Nramp1 gene controls macrophage resistance or susceptibility to

several intracellular microorganisms; however, there is conflicting evidence regarding its role during infection with virulent Mycobacterium tuberculosis. Nitric oxide (NO) is a potent antimycobacterial agent produced by macrophages, which is also regulated by Nramp1. The in vitro ability of B10R (resistant) and B10S (susceptible) murine macrophages to inhibit M. tuberculosis H37Rv and to produce NO in response to infection and interferon-.gamma. (IFN-.gamma.) was compared. Infected B10R macrophages inhibited [3H]uracil incorporation by M. tuberculosis and produced higher amts. of NO than did B10S macrophages. IFN-.gamma. increased the inhibitory activity of both cells. Inhibition of M. tuberculosis by IFN-.gamma.-activated B10R macrophages was reversed by NG-monomethyl-L-arginine (NGMMA). L-Arginine restored NO prodn. and increased the antimycobacterial activity by IFN-.gamma.-stimulated NGMMA-treated macrophages. The Bcg/Nramp1 gene may regulate macrophage resistance or susceptibility to virulent M. tuberculosis by a differential capability of these cells to produce NO.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:476510 CAPLUS
DN 127:204321
TI Differential induction of apoptosis by virulent Mycobacterium tuberculosis in resistant and susceptible murine macrophages. Role of nitric oxide and mycobacterial products
AU ***Rojas, Mauricio*** ; Barrera, Luis F.; Puzo, Germain; Garcia, Luis F.
CS Lab. Central Investigaciones, Centro Investigatciones Medicas, Facultad Medicina, Univ. Antiquia, Medelin, Colombia
SO Journal of Immunology (1997), 159(3), 1352-1361
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Resistance and susceptibility and macrophages to mycobacteria are under the control of the Bcg/Nramp1 gene, which also controls the NO- (nitric oxide) prodn. in response to macrophage activators. There is recent evidence indicating that mycobacteria induces apoptosis in infected macrophages. Using murine macrophage lines, congenic at the Bcg/Nramp1 genes, this report shows that B10R are more prone than B10S macrophages to undergo apoptosis after exposure to live virulent Mycobacterium tuberculosis H37Rv (Mtb) or PPD, as detd. by cell viability, DNA fragmentation, hypoploidy, and the terminal deoxynucleotide transferase dUTP-biotin nick-end labeling assay. Induction of apoptosis correlated with NO- prodn. Aminoguanidine and anti-TNF-.alpha.- inhibited NO- prodn. and apoptosis. B10R and B10S macrophages were equally affected by sodium nitroprusside, a donor of NO-, but its effect, mainly in B10R cells, was enhanced by the presence of Mtb. Nonvirulent mycobacteria induced lower levels of NO- and did not cause cell death. Killed Mtb, mannose-capped lipoarabinomannan (ManLAM), and LPS rescued macrophages from apoptosis albeit induce NO-. These findings suggest that existence of opposite pathways: metabolically active mycobacteria promotes apoptosis whereas their structural components inhibit it. Apoptosis may be a crit. mechanism by which Nramp1 gene controls the macrophage infection with virulent mycobacteria.

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:381685 CAPLUS
DN 127:105781
TI An alternative to phosphotyrosine-containing motifs for binding to an SH2 domain
AU ***Rojas, Mauricio*** ; Yao, SongYi; Donahue, John P.; Lin, Yao-Zhong
CS Dep. Microbiol. Immunol., Vanderbilt Univ. Sch. Med., Nashville, TN, 37232-2363, USA
SO Biochemical and Biophysical Research Communications (1997), 234(3), 675-680
CODEN: BBRCA9; ISSN: 0006-291X
PB Academic
DT Journal

LA English
AB Shc is an important signaling protein whose overexpression leads to cell transformation in NIH 3T3 fibroblasts. Although the formation of Shc/Grb2 complexes involving Shc tyrosine residue 317 is necessary to induce this transformation, the Shc proteins in these Shc-overexpressing cells are not substantially tyrosine-phosphorylated. This observation led to our hypothesis that the non-phosphorylated Tyr317-contg. region of Shc might have specific affinity for the Grb2 protein. We show here that cell-permeable peptides encompassing the Shc Tyr317 region, 312FDDPSYVNVQNL323, can bind to the SH2 domain of Grb2 regardless of the state of tyrosine phosphorylation. When delivered into cells, both phosphorylated and non-phosphorylated Shc peptides inhibit growth factor-induced Shc/Grb2 protein-protein interaction. The non-phosphorylated Shc peptides with single point mutations at Asp313, Asp314, or Tyr317 are inactive, suggesting that these residues play an important role in Grb2 protein recognition. Our findings represent the first paradigm of the specific interaction between an unphosphorylated tyrosine-contg. region and an SH2 domain and have important implications for understanding the mechanism of cell transformation by Shc overexpression.
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:681566 CAPLUS
DN 126:1643
TI Controlling epidermal growth factor (EGF)-stimulated Ras activation in intact cells by a cell-permeable peptide mimicking phosphorylated EGF receptor
AU ***Rojas, Mauricio*** ; Yao, SongYi; Lin, Yao-Zhong
CS Department Microbiology Immunology, Vanderbilt University School Medicine, Nashville, TN, 37232-2363, USA
SO Journal of Biological Chemistry (1996), 271(44), 27456-27461
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB EGF-stimulated Ras activation involves specific interactions between the EGF receptor (EGFR), the adaptor proteins Grb2 and Shc, and the nucleotide exchange factor Sos-1. Study and control of these protein-protein interactions in vivo can be greatly promoted by introducing intracellular reagents that mimic EGFR functions. Here, the authors showed that a synthetic phosphopeptide encompassing the autophosphorylation site 1068 of EGFR formed a complex with endogenous Grb2 after this peptide was delivered into intact cells by a cell-permeable peptide import technique. Consequently, this intracellular peptide inhibited EGF-induced EGFR/Grb2 assocns. but not EGFR/Shc or Shc/Grb2 assocns. Peptide-mediated disruption of the EGF/Grb2/Sos-1 cascade led to reduced Ras activation and mitogen-activated protein kinase activation. These results indicate that the binding of Grb2 to the phosphorylated Tyr-1068 of EGFR is crucial to the EGF-induced Ras/mitogen-activated protein kinase signaling pathway. The application of cell-permeable peptides to this study demonstrates a useful biochem. tool to this study demonstrates a useful biochem. tool to probe and control various intracellular processes involved in signal transduction and gene transcription.

L2 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:534561 CAPLUS
DN 121:134561
TI Unambiguous 13C NMR assignment of acnistins and absolute configuration of acnistin A
AU Gutierrez Luis, Javier; Echeverri, Fernando; Quinones, Winston; Gonzalez, Antonio G.; Torres, Fernando; Cardona, Gloria; Archbold, Rodendo; ***Rojas, Mauricio*** ; Perales, Aurea
CS Inst. Bioorg., Univ. La Laguna, La Laguna, 38206, Spain
SO Steroids (1994), 59(5), 299-304
CODEN: STEDAM; ISSN: 0039-128X
DT Journal
LA English
AB Carbon and proton atoms were fully assigned in ta new type of withanolide by HMQC and HMBC expts. The abs. configuration of acnistin A (I) was

detd. by x-ray diffraction. Proton and 13C NMR measurements are particularly useful in identifying members of this group of natural products.

L2 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:491270 CAPLUS
DN 119:91270
TI Irenolone and emenolone: two new types of phytoalexin from Musa paradisiaca
AU Luis, Javier G.; Echeverri, Fernando; Quinones, Winston; Brito, Ivan; Lopez, Matias; Torres, Fernando; Cardona, Gloria; Aguiar, Zahira; Pelaez, Carlos; ***Rojas, Mauricio***
CS Inst. Bio-Org., Univ. La Laguna, La Laguna, 38206, Spain
SO Journal of Organic Chemistry (1993), 58(16), 4306-8
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Phenalenone-type phytoalexins were obtained for the first time from bananas and identified by COSY 1H-1H, HMQC and HMBC techniques, and X-ray anal., among other methods. The aminoglycoside kanamycin was studied as a phytoalexin inducer in banana leaves and fruit and compared with the effects produced by the fungus Mycosphaerella fijiensis. The Ph side chain in banana phytoalexins is not in the same position as in other plant phenalenones and so an alternative biogenetic pathway has been proposed and verified. The specific response evoked by kanamycin opens the way to the study of the host-plant relationship from a new angle since more phytoalexin inducers can be designed on the basis of the chem. constituents of the microorganisms involved or on synthetic kanamycin analogs and used to improve the plants' defense mechanisms.

L2 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:533407 CAPLUS
DN 119:133407
TI Larvicidal activity of 7-methoxyaromadendrin against Culex sp. larvae
AU Echeverri, Fernando; Torres, Fernando; Cardona, Gloria; Lopez, Jairo; Quinones, Winston; Gallego, Luis H.; Pelaez, Carlos A.; ***Rojas,*** *** Mauricio*** ; Garcia, Fernando; Restrepo, Luz Marina
CS Dep. Quim., Univ. Antioquia, Medellin, Colombia
SO Revista Boliviana de Quimica (1992), 11(1), 43-5
CODEN: RBQUDX; ISSN: 0250-5460
DT Journal
LA Spanish
AB At 250 ppm the dihydroflavonol 7-methoxyaromadendrin (extd. from Eucalyptus tereticornis resin) was highly larvicidal (24 h) to Culex mosquitoes. Moderate mortality was obtained at 125 ppm. Problems assocd. with the soly. of 7-methoxyaromadendrin are discussed.

L2 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:513602 CAPLUS
DN 119:113602
TI Phytoalexins in diseased tree tomato fruit and their antibiotic activity
AU Echeverri, Fernando; Torres, Fernando; Cardona, Gloria; Lopez, Jairo; Quinones, Winston; Gallego, Luis H.; Pelaëz, Carlos A.; ***Rojas,*** *** Mauricio*** ; Garcia, Fernando; Restrepo, Luz Marina
CS Dep. Quim., Univ. Antioquia, Medellin, Colombia
SO Revista Boliviana de Quimica (1992), 11(1), 39-41
CODEN: RBQUDX; ISSN: 0250-5460
DT Journal
LA Spanish
AB Two phytoalexins were isolated from fruit of tree tomato (Cyphomandra betacea) infected by Colletotrichum gloeosporioides. One of the phytoalexins (benzoic acid) was very active against the pathogen.

L2 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:508124 CAPLUS
DN 117:108124
TI Isolation of an ingestion deterrent from Passiflora foetida L
AU Echeverri, Fernando; Torres, Fernando; Cardona, Gloria; Lopez, Jairo; Quinones, Winston; Gallego, Luis H.; Pelaez, Carlos; ***Rojas,*** *** Mauricio*** ; Garcia, Fernando; Restrepo, Luz Marina
CS Dep. Quim., Univ. Antioquia, Medellin, Colombia

SO Revista Boliviana de Quimica (1991), 10(1), 25-9
CODEN: RBQUDX; ISSN: 0250-5460
DT Journal
LA Spanish
AB Ten flavonoids were isolated from the resin of P. foetida. One of them, ermanin, showed a strong feeding deterrent activity toward Dione juno larvae.

L2 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:466651 CAPLUS
DN 117:66651
TI Withajardines: structure and activity
AU Echeverri, Fernando; Torres, Fernando; Cardona, Gloria; Lopez, Jairo; Quinones, Winston; Gallego, Luis H.; Pelaez, Carlos; ***Rojas,*** *** Mauricio*** ; Garcia, Fernando; Restrepo, Luz Marina
CS Dep. Quim., Univ. Antioquia, Medellin, Colombia
SO Revista Boliviana de Quimica (1991), 10(1), 21-3
CODEN: RBQUDX; ISSN: 0250-5460
DT Journal
LA Spanish
AB Withajardin A and withajardin B were isolated from Deprea orinocensis leaves. Their structures were identified by spectral and chem. data. The compds. showed immunosuppressant and activities.

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E1 1 MORA ALVAREZ YUNUEN GUADALUPE/AU
E2 5 MORA AMERIGO E/AU
E3 4 --> MORA ANA/AU
E4 23 MORA ANA L/AU
E5 1 MORA ANA LUCIA/AU
E6 1 MORA ANACLETO/AU
E7 1 MORA ANDRE/AU
E8 2 MORA ANDRES/AU
E9 1 MORA ANDRES E/AU
E10 1 MORA ANDRES ELOY/AU
E11 1 MORA ANGELA L/AU
E12 1 MORA ANGELA MARIA MOYA/AU

=> s e3-e5
L3 28 ("MORA ANA"/AU OR "MORA ANA L"/AU OR "MORA ANA LUCIA"/AU)

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L4 21 DUP REM L3 (7 DUPLICATES REMOVED)

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YOU HAVE REQUESTED DATA FROM 21 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 21 MEDLINE on STN
AN 2005013057 IN-PROCESS
DN PubMed ID: 15475380
TI Endotoxin-induced lung injury in mice: structural, functional, and biochemical responses.
AU Rojas Mauricio; Woods Charles R; ***Mora Ana L*** ; Xu Jianguo; Brigham Kenneth L
CS Division of Pulmonary, Allergy and Critical Care, Center for Translational Research of the Lung, Emory University School of Medicine, Atlanta, GA 30322, USA.. mrojas@emory.edu
NC 5 P01 HL-0669496-02 (NHLBI)
SO American journal of physiology. Lung cellular and molecular physiology, (2005 Feb) 288 (2) L333-41.
Journal code: 100901229. ISSN: 1040-0605.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20050111
Last Updated on STN: 20050126
AB Acute lung injury is usually a complication of sepsis, and endotoxin treatment of mice is a frequently used experimental model. To define this

model and to clarify pathogenesis of the lung injury, we injected with 1 mg/kg endotoxin ip and measured pulmonary function, pulmonary edema, serum concentrations of cytokines and growth factors, and lung histology over 48 h. During the first 6 h, tidal volume and minute volume increased and respiratory frequency decreased. Serum concentrations of cytokines showed three patterns: 10 cytokines peaked at 2 h and declined rapidly, two peaked at 6 h and declined, and two had biphasic peaks at 2 and 24 h. Growth factors increased later and remained elevated longer. Both collagen and fibronectin were deposited in the lungs beginning within hours of endotoxin and resolving over 48 h. Histologically, lungs showed increased cellularity at 6 h with minimal persistent inflammation at 48 h. Lung water peaked at 6 h and gradually decreased over 48 h. We conclude that intraperitoneal administration of endotoxin to mice causes a transient systemic inflammatory response and transient lung injury and dysfunction. The response is characterized by successive waves of cytokine release into the circulation, early evidence of lung fibrogenesis, and prolonged increases in growth factors that may participate in lung repair.

L4 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
AN 2004:771553 CAPLUS
DN 141:348504
TI An IL-4R.alpha. Allelic Variant, I50, Acts as a Gain-of-Function Variant Relative to V50 for Stat6, But Not Th2 Differentiation
AU Stephenson, Linda; Johns, Mary H.; Woodward, Emily; ***Mora, Ana L.*** ; Boothby, Mark
CS Department of Microbiology and Immunology, Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Immunology (2004), 173(7), 4523-4528
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Signaling through the IL-4R .alpha.-chain (IL-4R.alpha.) is crucial for the development of Th2 cells, central effectors in atopic disease. Alleles of the IL-4R.alpha. have been identified that have been variably assocd. with increased incidence of allergic disease, but there is little direct evidence that any variant is sufficient to alter a target that dets. allergic pathophysiol. or susceptibility. Variants of IL-4R.alpha. encoding isoleucine instead of valine at position 50 (I50 vs V50, resp.) can signal increased Stat6-dependent transcriptional activity, whether in an I50, Q551 or I50, R551 haplotype. Strikingly, signaling through these receptors did not increase the efficiency of Th2 development or the IL-4 mediated repression of Th1 development or a target gene, IL-18R.alpha.. Further, IL-4-induced proliferation was similar for Th2 cells independent of the variant expressed. Together these findings indicate that IL-4R.alpha. variants that exhibit gain-of-function with respect to Stat6 do not act directly through alterations in Th2/Th1 induction after Ag exposure. The data further suggest that for such variants, any mechanistic involvement is based on a role in cellular targets of Th2 cytokines.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
AN 2004:97160 CAPLUS
DN 140:180089
TI NF-.kappa.B Controls Cell Fate Specification, Survival, and Molecular Differentiation of Immunoregulatory Natural T Lymphocytes
AU Stanic, Aleksandar K.; Bezbradica, Jelena S.; Park, Jang-June; Matsuki, Naoto; ***Mora, Ana L.*** ; Van Kaer, Luc; Boothby, Mark R.; Joyce, Sebastian
CS Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN, 37232, USA
SO Journal of Immunology (2004), 172(4), 2265-2273
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Ontogenetic, homeostatic, and functional deficiencies within immunoregulatory natural T (iNKT) lymphocytes underlie various

inflammatory immune disorders including autoimmunity. Signaling events that control cell fate specification and mol. differentiation of iNKT cells are only partly understood. Here we demonstrate that these processes within iNKT cells require classical NF-.kappa.B signaling. Inhibition of NF-.kappa.B signaling blocks iNKT cell ontogeny at an immature stage and reveals an apparent, novel precursor in which neg. selection occurs. Most importantly, this block occurs due to a lack of survival signals, as Bcl-xL overexpression rescues iNKT cell ontogeny. Maturation of immature iNKT cell precursors induces Bcl-2 expression, which is defective in the absence of NF-.kappa.B signaling. Bcl-xL overexpression also rescues this maturation-induced Bcl-2 expression. Thus, antiapoptotic signals relayed by NF-.kappa.B critically control cell fate specification and mol. differentiation of iNKT cells and, hence, reveal a novel role for such signals within the immune system.

RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
AN 2004:1044021 CAPLUS
TI Susceptibility to allergic lung disease regulated by recall responses of dual-receptor memory T cells*
AU Aronica, Mark A.; Swaidani, Shadi; Zhang, Yan H.; Mitchell, Daphne; ***Mora, Ana L.*** ; McCarthy, Susan; O'Neal, Jamye; Topham, David; Sheller, James R.; Boothby, Mark
CS From the Department of Pulmonary, Allergy and Critical Care Medicine
SO Journal of Allergy and Clinical Immunology (2004), 114(6), 1441-1448
CODEN: JACIBY; ISSN: 0091-6749
PB Elsevier Inc.
DT Journal
LA English
AB Microbial infections are assocd. with the initial susceptibility to and flares of asthma. However, immunol. mechanisms whereby infections might alter the asthmatic phenotype are lacking. To test the hypothesis that memory T cells specific both for a viral antigen and an allergen could influence the pathogenesis of allergic disease in vivo. We developed a system in which 2 distinct T-cell receptors coexist on the T-cell surface, 1 specific for a virus and the other for an inhaled antigen. We show that a population of dual-receptor T cells, polarized through a virus-specific T-cell receptor to contain TH1 or TH2 cells, can be reactivated through an unrelated T-cell receptor in recall responses in vivo. Quiescent memory cells derived from a TH1-polarized effector population blocked the development of airway hyperreactivity in a model of allergic lung disease, in assocn. with decreased induction of chemokines and eosinophil recruitment. Conversely, reactivation of quiescent TH2 cells after inhalation of antigen or virus infection was sufficient to lead to the development of airway hyperresponsiveness and allergic pulmonary inflammation in mice whose lungs were previously normal. These data provide evidence that dual-receptor memory T cells can regulate allergic disease susceptibility and suggest that they may play a role in mediating the influence of microbes on asthma pathogenesis.

L4 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4
AN 2003:601490 CAPLUS
DN 139:196014
TI New Programming of IL-4 Receptor Signal Transduction in Activated T Cells: Stat6 Induction and Th2 Differentiation Mediated by IL-4R.alpha. Lacking Cytoplasmic Tyrosines
AU ***Mora, Ana L.*** ; Stephenson, Linda M.; Enerson, Ben; Youn, Jeehee; Keegan, Achsah D.; Boothby, Mark
CS Dep. Microbiol., Vanderbilt Univ. Med. Sch., Nashville, TN, 37232, USA
SO Journal of Immunology (2003), 171(4), 1891-1900
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Signaling by the IL-4 receptor .alpha.-chain (IL-4R.alpha.) is a key determinant of the development of the Th2 lineage of effector T cells. Studies performed in tissue culture cell lines have indicated that tyrosines of the IL-4R.alpha. cytoplasmic tail are necessary for the induction of Stat6, a transcription factor required for Th2 differentiation. Surprisingly, we have found that in activated T cells,

IL-4R.alpha. chains lacking all cytoplasmic tyrosines promote induction of this IL-4-specific transcription factor and efficient commitment to the Th2 lineage. Mutagenesis of a tyrosine-free cytoplasmic tail identifies a requirement for the serine-rich ID-1 region in this new program of IL-4R signal transduction obsd. in activated T cells. Addnl. findings suggest that an extracellular signal-regulated kinase pathway can be necessary and sufficient for the ability of such tyrosine-free IL-4R.alpha. chains to mediate Stat6 induction. These results provide novel evidence that the mol. mechanisms by which a cytokine specifically induces a Stat transcription factor can depend on the activation state of T lymphoid cells. Furthermore, the data suggest that one pathway by which such new programming may be achieved is mediated by extracellular signal-regulated mitogen-activated protein kinases.

RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5
AN 2003:601470 CAPLUS
DN 139:196206
TI T Cell-Intrinsic Requirement for NF-.kappa.B Induction in Postdifferentiation IFN-.gamma. Production and Clonal Expansion in a Th1 Response
AU Corn, Radiah A.; Aronica, Mark A.; Zhang, Fuping; Tong, Yingkai; Stanley, Sarah A.; Kim, Se Ryoung Agnes; Stephenson, Linda; Enerson, Ben; McCarthy, Susan; ***Mora, Ana*** ; Boothby, Mark
CS Department of Microbiology and Immunology, Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Immunology (2003), 171(4), 1816-1824
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB NF-.kappa.B/Rel transcription factors are linked to innate immune responses and APC activation. Whether and how the induction of NF-.kappa.B signaling in normal CD4+ T cells regulates effector function are not well-understood. The liberation of NF-.kappa.B dimers from inhibitors of .kappa.B (I.kappa.Bs) constitutes a central checkpoint for physiol. regulation of most forms of NF-.kappa.B. To investigate the role of NF-.kappa.B induction in effector T cell responses, we targeted inhibition of the NF-.kappa.B/Rel pathway specifically to T cells. The Th1 response in vivo is dramatically weakened when T cells defective in their NF-.kappa.B induction (referred to as I.kappa.B.alpha.(.DELTA.N) transgenic cells) are activated by a normal APC population. Analyses in vivo, and IL-12-supplemented T cell cultures in vitro, reveal that the mechanism underlying this T cell-intrinsic requirement for NF-.kappa.B involves activation of the IFN-.gamma. gene in addn. to clonal expansion efficiency. The role of NF-.kappa.B in IFN-.gamma. gene expression includes a modest decrease in Stat4 activation, T box expressed in T cell levels, and differentiation efficiency along with a more prominent postdifferentiation step. Further, induced expression of Bcl-3, a trans-activating I.kappa.B-like protein, is decreased in T cells as a consequence of NF-.kappa.B inhibition. These findings indicate that NF-.kappa.B induction in T cells regulates efficient clonal expansion, Th1 differentiation, and IFN-.gamma. prodn. by Th1 lymphocytes at a control point downstream from differentiation.

RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 6
AN 2002:444995 CAPLUS
DN 137:246465
TI .beta.1 Integrin triggering affects leukemic cell line sensitivity to natural killer cells
AU Rubio, Gonzalo; Ferez, Xabier; ***Mora, Ana*** ; Galvez, Jesus; Chicano, Antonio; Garcia-Penarrubia, Pilar
CS Division of Immunology, Miguel Hernandez University, San Juan de Alicante, 03550, Spain
SO Cancer Immunology Immunotherapy (2002), 51(3), 130-138
CODEN: CIIMDN; ISSN: 0340-7004
PB Springer-Verlag
DT Journal

LA English
AB The role of .beta.1 (CD29) integrins in natural killer (NK) cell-target cell conjugation and cytotoxicity has not been clearly established. Ligation of .beta.1 integrins in NK cells can modulate the lytic capacity in both a pos. and a neg. manner; however, the contribution of the .beta.1 integrins present on target cells remains to be evaluated. Here, we analyzed the effect of .beta.1 integrins expressed by potential tumor target cells on conjugation and cytotoxicity. Using normalized flow cytometry binding assays, we demonstrated that the pretreatment of MOLT-4, K562, U-937 and HL-60 human leukemia target cell lines with selected anti-.beta.1 monoclonal antibodies (mAb) increased conjugation to human NK cell line NKL as well as to purified NK cells. Only mAb recognizing residues 207-218 of the .beta.1 subunit and functionally involved in the induction of homotypic adhesion (functional epitope A1) increased conjugation of all the target cells. Moreover, mAb to adhesion mols. different from .beta.1 but also inducers of homotypic adhesion of the target cells, i.e. CD43 and CD50 (ICAM-3), failed to increase conjugation to NKL cells. Cytotoxicity assays demonstrated that lysis of NK-sensitive target cells (MOLT-4) also increased after pretreatment with anti-.beta.1 epitope A1 mAb. Importantly, pretreatment of NK-resistant target cells (U-937 and HL-60) with anti-.beta.1 mAb was not able to outweigh the cytotoxic inhibitory mechanisms controlled by HLA class I mols. However, simultaneous masking of HLA class I mols. with mAb and pretreatment with anti-.beta.1 mAb rendered NK-resistant cells susceptible to lysis, as predicted by the missing self hypothesis. Triggering of tumor target cells through .beta.1 integrins may thus play a role in conjugation to NK cells as well as in co-stimulation of cell-mediated cytotoxicity.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:832559 CAPLUS
DN 136:117323
TI Inefficient ZAP-70 phosphorylation and decreased thymic selection in vivo result from inhibition of NF-.kappa.B/Rel
AU ***Mora, Ana L.*** ; Stanley, Sarah; Armistead, Wade; Chan, Andrew C.; Boothby, Mark
CS Department of Microbiology and Immunology, Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Immunology (2001), 167(10), 5628-5635
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Signaling from the TCR regulates T lymphoid survival, deletion by apoptosis, and selective clonal expansion. One set of signaling pathways activated during thymic selection leads to degrdn. of a cytosolic retention protein, the inhibitor of .kappa.B (I.kappa.B).alpha., followed by nuclear translocation of the NF-.kappa.B/Rel family of transcription factors. It has been found previously that NF-.kappa.B proteins mediate a pathway signaling the survival of mature T cells and protection of thymocytes against TNF-induced apoptosis. In contrast, we show in this study that a transgenic inhibitor of NF-.kappa.B/Rel signaling interferes with the neg. selection of immature thymocytes by endogenous MHC ligands in vivo. Pos. selection of the H-Y TCR also was diminished. This attenuation of thymic selection efficiency was assocd. with decreased ZAP-70 phosphorylation and TCR signaling of CD69 induction. These findings demonstrate that the NF-.kappa.B transcriptional pathway plays an important role in normal processes of clonal deletion and they indicate that the NF-.kappa.B/I.kappa.B axis can regulate the efficiency of TCR signaling.
RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:125151 CAPLUS
DN 134:294293
TI NF-.kappa.B/rel participation in the lymphokine-dependent proliferation of T lymphoid cells
AU ***Mora, Ana L.*** ; Youn, Jeehee; Keegan, Achsah D.; Boothby, Mark
CS Department of Microbiology and Immunology, Vanderbilt University Medical

AN 2002:493395 CAPLUS
DN 137:261439
TI Lymphokine-dependent proliferation of T-lymphoid cells: regulated responsiveness and role in vivo
AU Boothby, Mark; ***Mora, Ana L.*** ; Stephenson, Linda M.
CS Department of Microbiology and Immunology, Vanderbilt University Medical School, Nashville, TN, 37232-2363, USA
SO Critical Reviews in Immunology (2001), 21(6), 487-522
CODEN: CCRIDE; ISSN: 1040-8401
PB Begell House, Inc.
DT Journal; General Review
LA English
AB A review. The discovery of lymphokines stemmed from their ability to promote T-lymphocyte proliferation in vitro. Even after 20 yr of intensive investigation, crucial aspects remain to be clarified about the role of specific lymphokines in T-cell proliferation and the biochem. mechanisms by which they play these roles, particularly in vivo. The present review focuses on conventional populations of TCR.alpha..beta. T cells. Older findings and new insights into the function of specific lymphokines in T-lymphocyte proliferation in vivo are summarized along with unanswered questions raised by these observations. Contributions of lymphokines to clonal proliferation arise from 2 processes: the protection of cells against apoptosis and the activation of cell cycling. Findings are underscored indicating that the activity of a particular lymphokine depends on the subset of T cells (CD4 vs. CD8; naive vs. memory) to which it binds, and that point to potential pitfalls of extrapolating from tissue culture-adapted models to the regulation of T cells in vivo. After summaries of signaling mechanisms related to the proliferative activity of lymphokines, recent findings are highlighted suggesting that such signaling is a regulated and plastic process rather than one fixed schema of action.
RE.CNT 267 THERE ARE 267 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:511936 CAPLUS
DN 136:165511
TI IL-4 signaling, gene transcription regulation, and the control of effector T cells
AU Boothby, Mark; ***Mora, Ana L.*** ; Aronica, Mark A.; Youn, Jeehee; Sheller, James R.; Goenka, Shreevrat; Stephenson, Linda
CS Department of Microbiology and Immunology and Medicine, Vanderbilt University Medical School, Nashville, TN, 37232-2363, USA
SO Immunologic Research (2001), 23(2 & 3), 179-191
CODEN: IMRSEB; ISSN: 0257-277X
PB Humana Press Inc.
DT Journal; General Review
LA English
AB A review. The central goal of the authors' research is to understand the regulation of lymphoid cells through mol. mechanisms of signal transduction and transcriptional control. A long-standing focus has been on changes that influence the effector function of mature lymphocytes. Work in the lab. is oriented toward the identification of new regulatory mechanisms using cell lines and primary cells, and the validation of these in vitro findings in mouse models of immune responses and diseases. Here, the authors summarize key insights into the regulation of T helper cell function during the phase of immunity where effector responses arise de novo. Particular interest has been centered on cytokine gene regulation as part of T cell differentiation into the Th1 and Th2 subsets. Information on IL-4 receptor signaling and the role of NF-.kappa.B transcription factors is reviewed. The authors' more recent work is designed to understand how regulation at the Th1/2 effector stages is related to the control of memory T cell survival, immune recall responses, and the role of these responses in immune-mediated disease.
RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:329658 CAPLUS
DN 131:115269
TI Costimulation reverses the defect in IL-2 but not effector cytokine

production by T cells with impaired I.kappa.B.alpha. degradation
AU Aune, Thomas M.; ***Mora, Ana L.*** ; Kim, Somee; Boothby, Mark; Lichtman, Andrew H.
CS Department of Medicine (Rheumatology), Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Immunology (1999), 162(10), 5805-5812
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Although the transcriptional basis for states of unresponsiveness in primary T cells is unclear, tolerant B lymphocytes exhibit inhibition of both c-Jun N-terminal kinase induction and I.kappa.B.alpha. (inhibitor of NF-.kappa.B.alpha.) degrdn., leading to lower levels of both nuclear AP-1 and NF-.kappa.B. Expression of an I.kappa.B.alpha. mutant resistant to signal-induced degrdn. in transgenic T cells caused markedly deficient effector cytokine (IL-4, IFN-.gamma.) prodn. after primary TCR stimulation despite a detectable level of nuclear NF-.kappa.B. A TCR response element from the IFN-.gamma. promoter, despite lacking detectable NF-.kappa.B/Rel sites, was also unresponsive to TCR ligation. Nuclear induction of AP-1 proteins in response to T cell activation was diminished in transgenic T cells. Costimulation induced by anti-CD28 mAb increased IL-2 prodn., but failed to reverse the defects in effector cytokine prodn. Taken together, these data indicate that impaired NF-.kappa.B/Rel signaling in T cells interferes with the signal transduction pathways required for efficient induction of effector cytokine prodn.
RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:692086 CAPLUS
DN 132:34706
TI Preferential role for NF-.kappa.B/Rel signaling in the type 1 but not type 2 T cell-dependent immune response in vivo
AU Aronica, Mark A.; ***Mora, Ana L.*** ; Mitchell, Daphne B.; Finn, Patricia W.; Johnson, Joyce E.; Sheller, James R.; Boothby, Mark R.
CS Divisions of Allergy, Pulmonary, Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Immunology (1999), 163(9), 5116-5124
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB T cell function is a crit. determinant of immune responses as well as susceptibility to allergic diseases. Activated T cells can differentiate into effectors whose cytokine profile is limited to type 1 (IFN-.gamma.-dominant) or type 2 (IL-4-, IL-5-dominant) patterns. To investigate mechanisms that connect extracellular stimuli with the regulation of effector T cell function, we have measured immune responses of transgenic mice whose NF-.kappa.B/Rel signaling pathway is inhibited in T cells. Surprisingly, these mice developed type 2 T cell-dependent responses (IgE and eosinophil recruitment) in a model of allergic pulmonary inflammation. In contrast, type 1 T cell responses were severely impaired, as evidenced by markedly diminished delayed-type hypersensitivity responses, IFN-.gamma. prodn., and Ag-specific IgG2a levels. Taken together, these data indicate that inhibition of NF-.kappa.B can lead to preferential impairment of type 1 as compared with type 2 T cell-dependent responses.
RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:597980 CAPLUS
DN 131:227644
TI Lineage-specific differences among CD8+ T cells in their dependence of NF-.vkappa.B/Rel signaling
AU ***Mora, Ana L.*** ; Chen, Daohong; Boothby, Mark; Rubin, Donald H.
CS Dep. Microbiology Immunology, Medical School, Vanderbilt Univ., Nashville, TN, 37232, USA
SO European Journal of Immunology (1999), 29(9), 2968-2980
CODEN: EJIMAF; ISSN: 0014-2980

PB Wiley-VCH Verlag GmbH
DT Journal
LA English
AB Whereas most CD8+ T cells in lymph nodes and spleen express the CD8.alpha..beta. heterodimer and depend absolutely on thymic competence for their development, a substantial population of T cells expressing CD8.alpha..alpha. matures extrathymically. Although the existence of these CD8 sublineages is well established, relatively little is known about differences that might exist among CD8 cells in their requirement for particular transcriptional pathways during the development and maintenance of normal populations. Transgenic mice whose T lineage expresses an I.vkappa.B.alpha. mutant exhibited decreased NF-.vkappa.B signaling and a diminution in mature CD8 T cells. The authors detd. that although TCR-dependent CD69 induction by CD8.alpha..alpha. and CD8.alpha..beta. T cells was unaffected by inhibition of NF-.vkappa.B, TCR.alpha..beta. CD8.alpha..beta. T cells were preferentially reduced compared to their TCR.alpha..beta. CD8.alpha..alpha. or TCR.gamma..delta. counterparts. This finding was most prominent in spleen, but was also apparent in Peyer's patches of transgenic mice. Diminished antiviral cytotoxic responses of CD8.alpha..beta. intraepithelial lymphocytes were obsd. after enteric reovirus infection. These results indicate that NF-.vkappa.B signaling is more important for the thymus-dependent TCR.alpha..beta. CD8.alpha..beta. population than for other CD8 lineages, and thus regulates the no., function, and normal balance of CD8 subsets in the periphery.
RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:477330 CAPLUS
DN 131:256215
TI Essential role of T cell NF-.kappa.B activation in collagen-induced arthritis
AU Seetharaman, Rajalakshmi; ***Mora, Ana L.*** ; Nabozny, Gerald; Boothby, Mark; Chen, Jin
CS Departments of Medicine/Rheumatology and Cell Biology, Vanderbilt University, Nashville, TN, 37232, USA
SO Journal of Immunology (1999), 163(3), 1577-1583
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB NF-.kappa.B/Rel proteins are ubiquitous transcription factors that are activated by proinflammatory signals or engagement of antigen (Ag) receptors. To study the role of NF-.kappa.B/Rel signaling in T lymphocytes during autoimmune disease, the authors investigated type II collagen-induced arthritis (CIA) in transgenic mice expressing a constitutive inhibitor of NF-.kappa.B/Rel [I.kappa.B.alpha.(.DELTA.N)] in the T lineage. Expression of the I.kappa.B.alpha.(.DELTA.N) transgene was persistently high in adult peripheral lymphoid organs and undetectable in T cell-depleted splenocytes, suggesting the expression of the transgene is restricted to the T lineage. The incidence and severity of CIA were decreased in these I.kappa.B.alpha.(.DELTA.N) transgenic mice compared with non-transgenic littermates. Inhibition of CIA was not due solely to a decrease in their CD8+ population because transfer of wild-type CD8+ cells into transgenic mice failed to restore disease susceptibility. Protection against disease was assocd. with a moderate decrease in clonal expansion and a profound and persistent decrease in Ag-induced IFN-.gamma. prodn. in vivo. Consistent with decreased level of anti-type II collagen-specific Abs and IFN-.gamma., serum levels of IgG2a anti-CII Abs were reduced. However, anti-CII-specific IgG1 levels were normal, indicating that some aspects of T cell help were unaffected. Apparently, inhibition of NF-.kappa.B in T cells impairs CIA development in vivo through decreases in type 1 T cell-dependent responses.
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:651707 CAPLUS
DN 130:37000
TI Controlled lipidation and encapsulation of peptides as a useful approach

to mucosal immunizations
AU ***Mora, Ana L.*** ; Tam, James P.
CS Dep. of Microbiology and Immunology, Vanderbilt University, Nashville, TN, 37232-2363, USA
SO Journal of Immunology (1998), 161(7), 3616-3623
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB To generate a useful strategy for mucosal immunization, we have developed an approach of lipidating a multiple Ag peptide (mAP) contg. part of the V3 loop from HIV-1 gp120IIIB. In this work, we compare two delivery systems, lipidated MAP in PBs and encapsulation in poly(DL-lactide-co-glycolide) microparticles. S.c. immunization, followed by intragastric administration of MAP peptide entrapped or not entrapped in microparticles, induced mucosal and systemic immune responses at local and distant sites, including mucosal IgA in saliva, vaginal secretions and feces, and IgG in blood. However, lipidated Ag delivered in microparticles induced higher levels of mucosal Abs, particularly of intestinal IgA, and generated CTL responses. In contrast, lipidated MAP delivered by nasal route microparticles was less effective in inducing CTL responses. These results demonstrate the feasibility of using a lipidated multimeric peptide for mucosal immunization to stimulate both systemic and mucosal immune systems, including the genital tract, irresp. of the route or method of delivery and without requiring the use of a carrier or an extraneous adjuvant.
RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:746694 CAPLUS
DN 130:109125
TI In vivo function of an interleukin 2 receptor .beta. chain (IL-2R.beta.)/IL-4R.alpha. cytokine receptor chimera potentiates allergic airway disease
AU Youn, Jeehee; Chen, Jin; Goenka, Shreevrat; Aronica, Mark A.; ***Mora,*** *** Ana L.*** ; Correa, Victor; Sheller, James R.; Boothby, Mark
CS Department of Microbiology and Immunology, Department of Medicine, Vanderbilt University Medical School, Nashville, TN, 37232, USA
SO Journal of Experimental Medicine (1998), 188(10), 1803-1816
CODEN: JEMEAV; ISSN: 0022-1007
PB Rockefeller University Press
DT Journal
LA English
AB Strength of T cell receptor (TCR) signaling, coreceptors, costimulation, antigen-presenting cell type, and cytokines all play crucial roles in detg. the efficiency with which type 2 T lymphocytes (Th2, Tc2) develop from uncommitted precursors. To investigate in vivo regulatory mechanisms that control the population of type 2 T cells and disease susceptibility, the authors have created lines of transgenic mice in which expression of a chimeric cytokine receptor (the mouse interleukin 2 receptor .beta. chain [IL-2R.beta.] extracellular domain fused to the cytoplasmic tail of IL-4R.alpha.) is targeted to the T lymphoid lineage using the proximal lck promoter. This chimera transduced IL-4-specific signals in response to IL-2 binding and dramatically enhanced type 2 responses (IL-4, IL-5, and IgE prodn.) upon in vitro TCR stimulation or in vivo antigen challenge. Thus, type 2 effector function was augmented by IL-4 signals transduced through a chimeric receptor expressed in a T cell-specific manner. This influence was sufficient for establishment of antigen-induced allergic airway hyperresponsiveness on a disease-resistant background (C57BL/6).
RE.CNT 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:652614 CAPLUS
DN 130:13192
TI Stimulus-dependent synergism of the antiapoptotic tumor necrosis factor receptor-associated factor 2 (TRAF2) and nuclear factor .kappa.B pathways
AU Lee, Soo Young; Kaufman, David R.; ***Mora, Ana L.*** ; Santana, Angela; Boothby, Mark; Choi, Yongwon
CS Department of Pathology, Hallym Medical School, Kangwon, 200-702, S. Korea

SO Journal of Experimental Medicine (1998), 188(7), 1381-1384
CODEN: JEMEAV; ISSN: 0022-1007
PB Rockefeller University Press
DT Journal
LA English
AB Tumor necrosis factor (TNF) signaling leads to pleiotropic responses in a wide range of cell types, in part by activating antiapoptotic and proapoptotic signaling pathways. Thus, although TNF can cause apoptosis and may prove useful in the treatment of malignancies, most cells are resistant to TNF-induced cell death unless de novo protein synthesis is inhibited. Previous studies suggested that TNF activation of the nuclear factor (NF)-.kappa.B transcription factor family antagonizes the proapoptotic signals initiated by TNF-.alpha.. TNF receptor-assocd. factor (TRAF)2 has also been shown to mediate crucial antiapoptotic signals during TNF stimulation, yet is not essential in activation of NF-.kappa.B under physiol. conditions, thus raising questions about the relation between these antiapoptotic pathways. The authors report here that inhibition of TRAF2 and NF-.kappa.B function in primary cells, by coexpression of a constitutive repressor of multiple NF-.kappa.B/Rel proteins (I.kappa.B.alpha..DN) and a dominant neg. form of TRAF2 (TRAF2.DN), synergistically enhanced TNF-induced apoptosis. The effects were stimulus dependent, such that neither inhibitory mol. affected Fas- and daunorubicin-induced apoptosis to the same degree as TNF-induced death. Thus, the NF-.kappa.B and TRAF2 pathways activate independent antiapoptotic mechanisms which act in concert to suppress the proapoptotic signals induced by TNF-.alpha..
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:359279 CAPLUS
DN 127:94072
TI Perturbation of the T lymphocyte lineage in transgenic mice expressing a constitutive repressor of nuclear factor (NF)-.kappa.B
AU Boothby, Mark R.; ***Mora, Ana L.*** ; Scherer, David C.; Brockman, Jeffrey A.; Ballard, Dean W.
CS Department of Microbiology and Immunology; rheumatology Division, Department of Medicine; and the Howard Hughes Medical Institute, Vanderbilt University Medical Center, Nashville, TN, 37232, USA
SO Journal of Experimental Medicine (1997), 185(11), 1897-1907
CODEN: JEMEAV; ISSN: 0022-1007
PB Rockefeller University Press
DT Journal
LA English
AB Members of the nuclear factor (NF)-.kappa.B/Rel family transcription factors are induced during thymic selection and in mature T lymphocytes after ligation of the T cell antigen receptor (TCR). Despite these findings, disruption of individual NF-.kappa.B/Rel genes has revealed no intrinsic defect in the development of mature T cells, perhaps reflecting functional redundancy. To circumvent this possibility, the T cell lineage was targeted to express a trans-dominant form of I.kappa.B.alpha. that constitutively represses the activity of multiple NF-.kappa.B/Rel proteins. Transgenic cells expressing this inhibitor exhibit a significant proliferative defect, which is not reversed by the addn. of exogenous interleukin-2. Moreover, mitogenic stimulation of splenocytes leads to increased apoptosis of transgenic T cells as compared with controls. In addn. to deregulated T cell growth and survival, transgene expression impairs the development of normal T cell populations as evidenced by diminished nos. of TCRhi CD8 single-pos. thymocytes. This defect was significantly amplified in the periphery and was accompanied by a decrease in CD4+ T cells. Taken together, these in vivo findings indicate that the NF-.kappa.B/Rel signaling pathway contains compensatory components that are essential for the establishment of normal T cell subsets.
RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:4741 CAPLUS
DN 116:4741
TI Molecular analysis of HLA DR4-.beta.1 gene in malaria vaccinees. Typing

and subtyping by PCR technique and oligonucleotides
AU Murillo, Luis Angel; Rocha, Claudia Lucia; ***Mora, Ana Lucia*** ; Kalil, Jorge; Goldenberg, Ana Karla; Patarroyo, Manuel Elkin
CS Inst. Immunol., Hosp. San Juan de Dios, Bogota, Colombia
SO Parasite Immunology (1991), 13(2), 201-10
CODEN: PAIMD8; ISSN: 0141-9838
DT Journal
LA English
AB The combination of the polymerase chain reaction (PCR) technique and synthetic oligonucleotides has proved to be a useful tool in the mol. anal. of HLA class II genes, allowing recognition of as little as a single nucleotide modification in the sequence of the gene. The mols. encoded by these genes have been assocd. with genetic control of the immune response and with susceptibility to certain diseases. Studies by the authors have shown 3 patterns of humoral immune response in the human volunteers vaccinated with the synthetic protein SPf 66; high, intermediate and low responders. Approx. 73.3% of the low responders were serol. typed as HLA DR4 and 42% as DQw6. These results encouraged a search for a subtype (Dw) correlation between the DR4 pos. individuals and the different humoral immune response patterns. Using oligotyping methods after previous amplification of the DR4 B1 exon, 20 DR4 volunteers were subtyped and classified as high, intermediate, and low responders. No direct assocn. was found between the HLA DR4 Dw special subtype in the high or low responders immunized with the SPf 66 vaccine.

=> s (fusion protein?) and (translocating) and IkappaB?
6 FILES SEARCHED...
L5 10 (FUSION PROTEIN?) AND (TRANSLOCATING) AND IKAPPAB?

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6 10 DUP REM L5 (0 DUPLICATES REMOVED)

=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 10 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 10 USPATFULL on STN
AN 2004:306965 USPATFULL
TI Monitoring gene silencing and annotating gene function in living cells
IN Michnick, Stephen William Watson, Westmount, CANADA
Belisle, Barbara, Moraga, CA, UNITED STATES
MacDonald, Marnie L., Pleasanton, CA, UNITED STATES
Westwick, John K., San Ramon, CA, UNITED STATES
Lamerdin, Jane Elizabeth, Livermore, CA, UNITED STATES
PI US 2004241636 A1 20041202
AI US 2004-856620 A1 20040529 (10)
PRAI US 2003-474283P 20030530 (60)
DT Utility
FS APPLICATION
LREP Isaac A. Angres, Suite 301, 2001 Jefferson Davis Highway, Arlington, VA, 22202
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2073
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The cell-based assays described in the present invention can be used to directly assess the sensitivity and specificity of the gene annotation reagent against its target, and to determine if a non-targeted gene participates in a pathway of interest or is functionally linked to another gene or protein. The combination of annotation reagents with such cell-based assays is useful for mapping genes (proteins) into cellular pathways on a genome-wide scale. Preferred assay embodiments include fluorescence or luminescence assays in intact (live or fixed) cells. Such fluorescence or luminescence assays include high-throughput or high-content assays for protein activity, subcellular localization, post-translational modifications, or interactions of proteins. Suitable assays may include protein-protein interaction assays; protein translocation assays; and post-translational modification assays. The invention can be used to assess the efficacy of any gene silencing

experiment, to determine the level of gene silencing that is achieved, and to map novel genes into biochemical pathways, and to identify novel pharmaceutical targets. The results also demonstrate the feasibility of employing this strategy in genome-wide functional annotation efforts.

L6 ANSWER 2 OF 10 USPATFULL on STN
AN 2004:298665 USPATFULL
TI Peptides for use as translocation factors
IN Crisanti, Andrea, London, UNITED KINGDOM
PI US 2004234527 A1 20041125
AI US 2004-479166 A1 20040429 (10)
WO 2002-GB3027 20020701
PRAI GB 2001-16047 20010629
DT Utility
FS APPLICATION
LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, PO BOX 142950, GAINESVILLE, FL, 32614-2950
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1271
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins that contain the amino acid sequence motif X.sup.1X.sup.1X.sup.2X.sup.3X.sup.1, where X.sup.1=R or K and X.sup.2 and X.sup.3=any amino acid have been found to translocate and can therefore be used in the manufacture of compositions for therapeutic applications. The proteins may also be used as translocation factors to deliver proteins or nucleic acids into a cell.

L6 ANSWER 3 OF 10 USPATFULL on STN
AN 2004:196424 USPATFULL
TI Lectin compositions and methods for modulating an immune response to an antigen
IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES
PA Genitrix, LLC (U.S. corporation)
PI US 2004151728 A1 20040805
AI US 2003-666834 A1 20030919 (10)
RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING
PRAI US 2002-404823P 20020820 (60)
US 2003-487407P 20030715 (60)
DT Utility
FS APPLICATION
LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
CLMN Number of Claims: 77
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 39129
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

L6 ANSWER 4 OF 10 USPATFULL on STN
AN 2004:165307 USPATFULL
TI Lectin compositions and methods for modulating an immune response to an antigen
IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES
PA Genitrix, LLC (U.S. corporation)
PI US 2004126793 A1 20040701
AI US 2003-666885 A1 20030919 (10)
RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING
PRAI US 2002-404823P 20020820 (60)

US 2003-487407P 20030715 (60)
DT Utility
FS APPLICATION
LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
CLMN Number of Claims: 147
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 28979
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

L6 ANSWER 5 OF 10 USPATFULL on STN
AN 2004:164872 USPATFULL
TI Lectin compositions and methods for modulating an immune response to an antigen
IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES
PA Genitrix, LLC (U.S. corporation)
PI US 2004126357 A1 20040701
AI US 2003-666886 A1 20030919 (10)
RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING
PRAI US 2002-404823P 20020820 (60)
US 2003-487407P 20030715 (60)
DT Utility
FS APPLICATION
LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 39007
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

L6 ANSWER 6 OF 10 USPATFULL on STN
AN 2004:12959 USPATFULL
TI Methods and compositions for diagnosing or monitoring auto immune and chronic inflammatory diseases
IN Wohlgemuth, Jay, Palo Alto, CA, UNITED STATES
Fry, Kirk, Palo Alto, CA, UNITED STATES
Woodward, Robert, Pleasanton, CA, UNITED STATES
Ly, Ngoc, San Bruno, CA, UNITED STATES
PI US 2004009479 A1 20040115
AI US 2002-131827 A1 20020424 (10)
RLI Continuation-in-part of Ser. No. US 2001-6290, filed on 22 Oct 2001, PENDING
PRAI US 2001-296764P 20010608 (60)
DT Utility
FS APPLICATION
LREP Michael R. Ward, Morrison & Foerster LLP, 425 Market Street, San Francisco, CA, 94105-2482
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)

LN.CNT 19677
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of diagnosing or monitoring an autoimmune or chronic inflammatory disease, particularly SLE in a patient by detecting the expression level of one or more genes or surrogates derived therefrom in the patient are described. Diagnostic oligonucleotides for diagnosing or monitoring chronic inflammatory disease, particularly SLE infection and kits or systems containing the same are also described.

L6 ANSWER 7 OF 10 USPATFULL on STN
AN 2003:220740 USPATFULL
TI Methods and compositions for diagnosing and treating rheumatoid arthritis
IN Pittman, Debra D., Windham, NH, UNITED STATES
Feldman, Jeffrey L., Arlington, MA, UNITED STATES
Shields, Kathleen M., Harvard, MA, UNITED STATES
Trepicchio, William L., Andover, MA, UNITED STATES
PI US 2003154032 A1 20030814
AI US 2001-23451 A1 20011217 (10)
PRAI US 2000-255861P 20001215 (60)
DT Utility
FS APPLICATION
LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25385
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

L6 ANSWER 8 OF 10 USPATFULL on STN
AN 2003:99724 USPATFULL
TI Proteins and druggable regions of proteins
IN Edwards, Aled, Toronto, CANADA
Arrowsmith, Cheryl, North York, CANADA
Greenblatt, Jack, Toronto, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068831 A1 20030410
AI US 2002-97125 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 4944
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.

L6 ANSWER 9 OF 10 USPATFULL on STN
AN 2003:99546 USPATFULL

TI Multi-target analysis of gene families for chemistry of high affinity and selective small molecules and other therapeutics
IN Arrowsmith, Cheryl, North York, CANADA
Greenblatt, Jack, Toronto, CANADA
Edwards, Aled, Toronto, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068651 A1 20030410
AI US 2002-97194 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5161
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.

L6 ANSWER 10 OF 10 USPATFULL on STN
AN 2003:99545 USPATFULL
TI Target analysis for chemistry of specific and broad spectrum anti-infectives and other therapeutics
IN Greenblatt, Jack, Toronto, CANADA
Edwards, Aled, Toronto, CANADA
Arrowsmith, Cheryl, North York, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068650 A1 20030410
AI US 2002-97193 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5051
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.

=> d bib ab kwic 10

L6 ANSWER 10 OF 10 USPATFULL on STN
AN 2003:99545 USPATFULL
TI Target analysis for chemistry of specific and broad spectrum anti-infectives and other therapeutics
IN Greenblatt, Jack, Toronto, CANADA
Edwards, Aled, Toronto, CANADA
Arrowsmith, Cheryl, North York, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068650 A1 20030410
AI US 2002-97193 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility

FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5051
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.
SUMM [0049] A " ***fusion*** ***protein*** " or "fusion polypeptide" refers to a polypeptide comprising a first amino acid sequence encoding a polypeptide linked to at least. . . not substantially homologous with any domain of the first polypeptide. The two polypeptide sequences may be linked in frame. A ***fusion*** ***protein*** may include a domain which is found (albeit in a different protein) in an organism which also expresses the first. . . fusion polypeptides may be fused to the N-terminus, the C-terminus, or the N- and C-terminus of the first polypeptide. Exemplary ***fusion*** ***proteins*** include polypeptides comprising a glutathione S-transferase tag (GST-tag), histidine tag (His-tag), an immunoglobulin domain or an immunoglobulin binding domain.
SUMM . . . synthesizer or by recombinant techniques or combinations thereof), a recombinant test compound, a natural or a non-natural test compound, a ***fusion*** ***protein*** or equivalent thereof and mutants, derivatives or combinations thereof.
SUMM [0135] In certain embodiments, a polypeptide which may be used in accordance with the methods of the invention is a ***fusion*** ***protein*** containing a domain which increases it solubility and/or facilitates its purification, identification, detection, and/or structural or functional characterization. Exemplary domains,. . . protein A, protein G, calmodulin-binding peptide, thioredoxin, maltose binding protein, HA, myc, poly arginine, poly His, poly His-Asp or FLAG ***fusion*** ***proteins*** and tags. Additional exemplary domains include domains that alter protein localization in vivo, such as signal peptides, type III secretion. . . the invention to include linker sequences between the polypeptide and the fusion domain in order to facilitate construction of the ***fusion*** ***protein*** or to optimize protein expression or structural constraints of the ***fusion*** ***protein*** . In another embodiment, the polypeptide may be constructed so as to contain protease cleavage sites between the fusion polypeptide and. . .
SUMM . . . Chem 269:10444-10450; and Perez et al. (1992) J Cell Sci 102:717-722). The transcytosis polypeptide may also be a non-naturally occurring membrane- ***translocating*** sequence (MTS), such as the peptide sequences disclosed in U.S. Pat. No. 6,248,558.
SUMM . . . of the invention may be tested for binding activity, as well as inhibitory ability, by expression as, for example, thioredoxin ***fusion*** ***proteins*** , each of which contains a discrete fragment of a protein of the invention (see, for example, U.S. Pat. Nos. 5,270,181. . .
SUMM . . . that the degenerate set of potential nucleotide sequences are expressible as individual polypeptides, or alternatively, as a set of larger ***fusion*** ***proteins*** (e.g. for phage display).
SUMM . . . et al., WO 88/06630; Fuchs et al., (1991) Bio/Technology 9:1370-1371; and Goward et al., (1992) TIBS 18:136-140), and the resulting ***fusion*** ***protein*** detected by panning, e.g. using a fluorescently labeled molecule which binds the cell surface protein, e.g. FITC-substrate, to score for. . .
SUMM [0157] In similar fashion, the gene library may be expressed as a ***fusion*** ***protein*** on the surface of a viral particle. For instance, in the filamentous phage system, foreign peptide sequences may be expressed. . . used in phage display libraries, as either of the phage gIII or gVIII coat proteins may be used to generate ***fusion*** ***proteins*** without disrupting the ultimate packaging of the viral

particle (Ladner et al., PCT publication WO 90/02909; Garrard et al., PCT. . .

SUMM . . . construct which includes coding sequences for a late vaccinia virus structural protein to produce a set of recombinant viruses expressing ***fusion*** ***proteins*** comprising a portion of the protein as part of the virion. The Hepatitis B surface antigen may also be utilized in this role as well. Similarly, chimeric constructs coding for ***fusion*** ***proteins*** containing a portion of a polypeptide and the poliovirus capsid protein may be created to enhance immunogenicity (see, for example,. . .

SUMM . . . cleavage site sequence at the N-terminus of the desired portion of the recombinant protein, may allow purification of the expressed ***fusion*** ***protein*** by affinity chromatography using a Ni.sup.2+ metal resin. The purification leader sequence may then be subsequently removed by treatment with. . .

DETD . . . GRK-7 AF282269
receptor kinases
(GRKs)
Hexokinase cancer type II
NM_000189
Casein Kinase
Glycogen
Synthase Kinase
(GSK),
LIM Kinase
(actin-binding
kinase
IkappaB
Kinases (IKK),
Rock and Related
Rho Interacting
Proteins (protein
kinases)
Pyruvate
Dehydrogenase
Kinase (PDK)
IL-1 receptor
kinases
Calcium/calmodu
lin-dependent
protein. . .

=> d bib ab 9

L6 ANSWER 9 OF 10 USPATFULL on STN
AN 2003:99546 USPATFULL
TI Multi-target analysis of gene families for chemistry of high affinity and selective small molecules and other therapeutics
IN Arrowsmith, Cheryl, North York, CANADA
Greenblatt, Jack, Toronto, CANADA
Edwards, Aled, Toronto, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068651 A1 20030410
AI US 2002-97194 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5161
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are

provided can be used to identify a compound that binds to at least two molecules or molecular complexes.

=> d bib ab kwic 9

L6 ANSWER 9 OF 10 USPATFULL on STN
AN 2003:99546 USPATFULL
TI Multi-target analysis of gene families for chemistry of high affinity and selective small molecules and other therapeutics
IN Arrowsmith, Cheryl, North York, CANADA
Greenblatt, Jack, Toronto, CANADA
Edwards, Aled, Toronto, CANADA
Mendlein, John D., Encincitas, CA, UNITED STATES
PI US 2003068651 A1 20030410
AI US 2002-97194 A1 20020312 (10)
PRAI US 2001-275216P 20010312 (60)
DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5161
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.
SUMM [0049] A " ***fusion*** ***protein*** " or "fusion polypeptide" refers to a polypeptide comprising a first amino acid sequence encoding a polypeptide linked to at least. . . not substantially homologous with any domain of the first polypeptide. The two polypeptide sequences may be linked in frame. A ***fusion*** ***protein*** may include a domain which is found (albeit in a different protein) in an organism which also expresses the first. . . fusion polypeptides may be fused to the N-terminus, the C-terminus, or the N- and C-terminus of the first polypeptide. Exemplary ***fusion*** ***proteins*** include polypeptides comprising a glutathione S-transferase tag (GST-tag), histidine tag (His-tag), an immunoglobulin domain or an immunoglobulin binding domain.
SUMM . . . synthesizer or by recombinant techniques or combinations thereof), a recombinant test compound, a natural or a non-natural test compound, a ***fusion*** ***protein*** or equivalent thereof and mutants, derivatives or combinations thereof.
SUMM [0135] In certain embodiments, a polypeptide which may be used in accordance with the methods of the invention is a ***fusion*** ***protein*** containing a domain which increases it solubility and/or facilitates its purification, identification, detection, and/or structural or functional characterization. Exemplary domains,. . . protein A, protein G, calmodulin-binding peptide, thioredoxin, maltose binding protein, HA, myc, poly arginine, poly His, poly His-Asp or FLAG ***fusion*** ***proteins*** and tags. Additional exemplary domains include domains that alter protein localization in vivo, such as signal peptides, type III secretion. . . the invention to include linker sequences between the polypeptide and the fusion domain in order to facilitate construction of the ***fusion*** ***protein*** or to optimize protein expression or structural constraints of the ***fusion*** ***protein*** . In another embodiment, the polypeptide may be constructed so as to contain protease cleavage sites between the fusion polypeptide and. . .
SUMM . . . Chem 269:10444-10450; and Perez et al. (1992) J Cell Sci 102:717-722). The transcytosis polypeptide may also be a non-naturally occurring membrane- ***translocating*** sequence (MTS), such as the peptide sequences disclosed in U.S. Pat. No. 6,248,558.
SUMM . . . of the invention may be tested for binding activity, as well as

inhibitory ability, by expression as, for example, thioredoxin ***fusion*** ***proteins*** , each of which contains a discrete fragment of a protein of the invention (see, for example, U.S. Pat. Nos. 5,270,181. . .

SUMM . . . that the degenerate set of potential nucleotide sequences are expressible as individual polypeptides, or alternatively, as a set of larger ***fusion*** ***proteins*** (e.g. for phage display).

SUMM . . . et al., WO 88/06630; Fuchs et al., (1991) Bio/Technology 9:1370-1371; and Goward et al., (1992) TIBS 18:136-140), and the resulting ***fusion*** ***protein*** detected by panning, e.g. using a fluorescently labeled molecule which binds the cell surface protein, e.g. FITC-substrate, to score for. . .

SUMM [0157] In similar fashion, the gene library may be expressed as a ***fusion*** ***protein*** on the surface of a viral particle. For instance, in the filamentous phage system, foreign peptide sequences may be expressed. . . used in phage display libraries, as either of the phage gIII or gVIII coat proteins may be used to generate ***fusion*** ***proteins*** without disrupting the ultimate packaging of the viral particle (Ladner et al., PCT publication WO 90/02909; Garrard et al., PCT. . .

SUMM . . . construct which includes coding sequences for a late vaccinia virus structural protein to produce a set of recombinant viruses expressing ***fusion*** ***proteins*** comprising a portion of the protein as part of the virion. The Hepatitis B surface antigen may also be utilized in this role as well. Similarly, chimeric constructs coding for ***fusion*** ***proteins*** containing a portion of a polypeptide and the poliovirus capsid protein may be created to enhance immunogenicity (see, for example,. . .

SUMM . . . cleavage site sequence at the N-terminus of the desired portion of the recombinant protein, may allow purification of the expressed ***fusion*** ***protein*** by affinity chromatography using a Ni.sup.2+ metal resin. The purification leader sequence may then be subsequently removed by treatment with. . .

DETD . . . GRK-7 AF282269
receptor kinases
(GRKs)
Hexokinase cancer type II
NM_000189
Casein Kinase
Glycogen
Synthase Kinase
(GSK),
LIM Kinase
(actin-binding
kinase
IkappaB
Kinases (IKK),
Rock and Related
Rho Interacting
Proteins (protein
kinases)
Pyruvate
Dehydrogenase
Kinase (PDK)
IL-1 receptor
kinases
Calcium/calmodu
lin-dependent
protein. . .

=> d bib ab kwic 1-8

L6 ANSWER 1 OF 10 USPATFULL on STN
AN 2004:306965 USPATFULL
TI Monitoring gene silencing and annotating gene function in living cells
IN Michnick, Stephen William Watson, Westmount, CANADA
Belisle, Barbara, Moraga, CA, UNITED STATES
MacDonald, Marnie L., Pleasanton, CA, UNITED STATES
Westwick, John K., San Ramon, CA, UNITED STATES
Lamerdin, Jane Elizabeth, Livermore, CA, UNITED STATES

WO03002598

PI US 2004241636 A1 20041202
AI US 2004-856620 A1 20040529 (10)
PRAI US 2003-474283P 20030530 (60)
DT Utility
FS APPLICATION
LREP Isaac A. Angres, Suite 301, 2001 Jefferson Davis Highway, Arlington, VA, 22202
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2073
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The cell-based assays described in the present invention can be used to directly assess the sensitivity and specificity of the gene annotation reagent against its target, and to determine if a non-targeted gene participates in a pathway of interest or is functionally linked to another gene or protein. The combination of annotation reagents with such cell-based assays is useful for mapping genes (proteins) into cellular pathways on a genome-wide scale. Preferred assay embodiments include fluorescence or luminescence assays in intact (live or fixed) cells. Such fluorescence or luminescence assays include high-throughput or high-content assays for protein activity, subcellular localization, post-translational modifications, or interactions of proteins. Suitable assays may include protein-protein interaction assays; protein translocation assays; and post-translational modification assays. The invention can be used to assess the efficacy of any gene silencing experiment, to determine the level of gene silencing that is achieved, and to map novel genes into biochemical pathways, and to identify novel pharmaceutical targets. The results also demonstrate the feasibility of employing this strategy in genome-wide functional annotation efforts.
DETD . . . RNAi silencing of AKT would result in failure of BAD to phosphorylate at ser site 136, thus preventing BAD from ***translocating*** to the cytosol and forming complexes with 14-3-3sigma. In our experiments, cotransfection of this pair with siAKT resulted in a. . .
DETD . . . NFkappaB as a fusion with a luminophore--such as GFP or YFP--and monitoring the redistribution of signal generated by the p65 ***fusion*** ***protein*** ; or alternatively co-expressing p65 tagged with a fragment of GFP or YFP along with the other (p50) subunit of NFkappa. . .
DETD . . . genes for two different fluorescent reporters, capable of undergoing FRET are separately fused to genes encoding of interest, and the ***fusion*** ***proteins*** are co-expressed in live cells. When a protein complex forms between the proteins of interest, the fluorophores are brought into. . .
DETD [0139] Schmid, J. A., et al. (2000) Dynamics of NFkappaB and ***IkappaBalpha*** studied with green fluorescent protein (GFP) ***fusion*** ***proteins*** . J. Biol. Chem. 275 (22): 17035-17042.

L6 ANSWER 2 OF 10 USPATFULL on STN
AN 2004:298665 USPATFULL
TI Peptides for use as translocation factors
IN Crisanti, Andrea, London, UNITED KINGDOM
PI US 2004234527 A1 20041125
AI US 2004-479166 A1 20040429 (10)
WO 2002-GB3027 20020701
PRAI GB 2001-16047 20010629
DT Utility
FS APPLICATION
LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, PO BOX 142950, GAINESVILLE, FL, 32614-2950
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1271
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins that contain the amino acid sequence motif X.sup.1X.sup.1X.sup.2X.sup.3X.sup.1, where X.sup.1=R or K and X.sup.2 and X.sup.3=any amino acid have been found to translocate and can therefore be used in the manufacture of compositions for therapeutic applications. The proteins may also be used as translocation factors to

School, Nashville, TN, 37232, USA
SO Journal of Immunology (2001), 166(4), 2218-2227
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
AB Proliferative responses of lymphoid cells to IL-2 and IL-4 depend on activation of the cells, but the mechanism(s) by which activation enhances cellular competence to respond to cytokines is not fully understood. The NF-.kappa.B/Rel family represents one signal transduction pathway induced during such activation. We show in this study that inhibition of NF-.kappa.B through the expression of an I.kappa.B.alpha. (inhibitory protein that dissocs. from NF-.kappa.B) mutant refractory to signal-induced degrdn. (I.kappa.B.alpha.(.DELTA.N)) interfered with the acquisition of competence to proliferate in response to IL-4 as well as IL-2. Thymocytes and T cells from I.kappa.B.alpha.(.DELTA.N) transgenic mice expressed normal levels of IL-2R subunits. However, transgenic cells exhibited a dramatic defect in Stat5A activation treatment with IL-2, and a similar defect was obsd. for IL-4-induced Stat5. In contrast, T lymphoid cells with inhibition of NF-.kappa.B showed normal insulin receptor substrate-2 phosphorylation and only a modest decrease in Stat6 activation and insulin receptor substrate-1 phosphorylation after IL-4 stimulation. These results indicate that the NF-.kappa.B/Rel/I.kappa.B.alpha. system can regulate cytokine receptor capacitation through effects on the induction of downstream signaling by the Stat transcription factor family.
RE.CNT 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:906547 CAPLUS
DN 136:149534
TI NF-.kappa.B activation plays an important role in the IL-4-induced protection from apoptosis
AU Zamorano, Jose; ***Mora, Ana L.*** ; Boothby, Mark; Keegan, Achsah D.
CS Department of Immunology, Holland Laboratory, American Red Cross, Rockville, MD, 20855, USA
SO International Immunology (2001), 13(12), 1479-1487
CODEN: INIMEN; ISSN: 0953-8178
PB Oxford University Press
DT Journal
LA English
AB IL-4 alone protects cells from apoptosis by insulin receptor substrate (IRS)-dependent and -independent mechanisms. However, in vivo cells are typically exposed to a no. of signals at the same time. To det. the contribution of co-stimulatory signals to the regulation of apoptosis by IL-4, the authors first analyzed whether tumor necrosis factor (TNF)-.alpha., which has been shown to inhibit the activation of IRS-1 by insulin, could modify IL-4 signaling and protection from apoptosis. The authors found that TNF-.alpha. cooperates with IL-4 in protecting 32D cells from factor withdrawal-induced apoptosis. This effect was independent of the expression of IRS-1, indicating that this cooperation is via an alternative anti-apoptotic pathway. Moreover, TNF-.alpha. had no effect on the activation of IRS-1 induced by IL-4. IL-4 enhanced TNF-.alpha.-induced activation of the transcription factor NF-.kappa.B. Interestingly, pharmacol. inhibition of NF-.kappa.B activation or protein synthesis resulted in the induction of cell death that could not be inhibited by IL-4, suggesting that IL-4 cooperates with NF-.kappa.B to signal protection from apoptosis. Supporting this hypothesis, IL-4 also increased NF-.kappa.B activation induced by anti-CD3 antibodies in primary T cells and protected them from apoptosis induced by receptor engagement. However, IL-4 was not able to inhibit apoptosis induced by anti-CD3 in T lymphocytes isolated from transgenic mice expressing a dominant-neg. form of I.kappa.B.alpha. that prevents NF-.kappa.B activation. Thus, in addn. to the previously identified IRS-1 pathway, IL-4-induced protection from apoptosis may also be mediated through cooperation with the NF-.kappa.B family of transcription factors.
RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

deliver proteins or nucleic acids into a cell.

SUMM . . . comprises the amino acid sequence defined above. The agent is therefore able to gain entry into the cell using the ***translocating*** properties of the peptide.

SUMM [0012] According to a further aspect of the present invention, there is a conjugate of a peptide capable of ***translocating*** across a cell membrane, and a therapeutic, diagnostic or cosmetic agent, wherein the peptide comprises the amino acid sequence motif. . .

SUMM [0014] In contrast to conventional ***translocating*** agents such as tat, VP22 or antennapedia, the present invention permits human-derived peptides to be used as the translocation factor,. . .

SUMM . . . of the invention, an expression vector is prepared that expresses a conjugate of the invention in the form of a ***fusion*** ***protein*** .

DETD [0019] Identifying this sequence enables many different ***translocating*** peptides to be produced.

DETD [0022] The ***translocating*** peptide may be in a truncated form or in a synthetic form, which can be produced readily, without the need. . .

DETD [0023] In a preferred embodiment, the ***translocating*** peptide fragment comprises no more than 50, preferably no more than 40, and most preferably no more than 30 amino. . .

DETD [0029] Functional variants of the ***translocating*** peptides/proteins may also be used. For example, proteins with high levels (greater than 70%, preferably greater than 90% and more. . .

DETD [0033] Compositions containing the protein to be administered may comprise any suitable excipient, diluent or buffer. No other ***translocating*** factor is required.

DETD [0043] The present invention also enables peptides comprising the motif to be used as the ***translocating*** vehicle for the delivery of other therapeutic, diagnostic or cosmetic agents across a cell membrane to effect entry of the. . .

DETD [0044] Peptides having the motif may therefore be used to prepare conjugates having the ***translocating*** region and a heterologous therapeutic agent.

DETD [0045] The term "conjugate" refers to a chimeric molecule formed from a ***translocating*** peptide and a therapeutic, diagnostic or cosmetic agent.

DETD . . . may be in the form of a chemical linker molecule, or the product may be in the form of a ***fusion*** ***protein*** .

DETD [0048] The ***translocating*** peptides may comprise the defined sequence motif more than once, for example two or three motifs may be present.

DETD [0049] The ***translocating*** peptides may also comprise a high percentage of Lys and Arg residues, typically greater than 5%, preferably more than 10%.. . .

DETD [0050] In addition to the ***translocating*** peptides identified herein, the conjugates comprise a discrete, i.e. heterologous, therapeutic, diagnostic or cosmetic agent. In the context of the. . .

DETD . . . linked via a covalent attachment. In one embodiment the agent is a peptide (or protein) and the conjugate is a ***fusion*** ***protein*** . The production of ***fusion*** ***proteins*** is known to those skilled in the art and comprises the production of a recombinant polynucleotide that encodes, in frame,. . .

DETD [0064] The proteins, whether to be administered as a replacement therapy, or for use as a ***translocating*** peptide, may also be modified to include additional substituents that help to target the protein/peptide to a particular cell. For. . .

DETD . . . (Somatomedin C). Acc. No. P05019

9. Inhibitor of nuclear factor kappa-B kinase alpha subunit (I kappa-B kinase alpha) (IkBKA) (IKK-alpha) (IKK-A) (***IkappaB*** kinase) (I-kappa-B kinase 1) (IKK1) (Conserved helix-loop-helix ubiquitous kinase) (Nuclear factor NFkappaB inhibitor kinase alpha) (NFKBIKA). Acc. No. O15111

10. Interferon. . .

DETD . . . of translocation was carried out by reading the activity of a .beta.-Galactosidase enzyme that was included as part of a ***fusion*** ***protein*** with the translocation agents. When provided with the appropriate galactoside substrate, the enzyme deglycosylates the substrate leading to the accumulation. . .

provided a sensitive means of detecting the amount of the .beta.-Galactosidase present in the samples, and ultimately, the amount of ***fusion*** ***protein*** delivered into the cells. .

CLM What is claimed is:

27. The conjugate according to claim 14, which is a ***fusion*** ***protein*** .

31. An expression vector that encodes a ***fusion*** ***protein*** wherein said ***fusion*** ***protein*** is a conjugate of a peptide capable of translocation across a cell membrane, and a therapeutic or diagnostic agent, wherein. . .

32. A recombinant cell line comprising an expression vector that encodes a ***fusion*** ***protein*** wherein said ***fusion*** ***protein*** is a conjugate of a peptide capable of translocation across a cell membrane, and a therapeutic or diagnostic agent, wherein. . .

L6 ANSWER 3 OF 10 USPATFULL on STN

AN 2004:196424 USPATFULL

TI Lectin compositions and methods for modulating an immune response to an antigen

IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES

PA Genitrix, LLC (U.S. corporation)

PI US 2004151728 A1 20040805

AI US 2003-666834 A1 20030919 (10)

RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING

PRAI US 2002-404823P 20020820 (60)
US 2003-487407P 20030715 (60)

DT Utility

FS APPLICATION

LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199

CLMN Number of Claims: 77

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 39129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

DETD DETAILED DESCRIPTION

[0097] The present invention is based, in part, on the discovery that a multifunctional ***fusion*** ***protein*** comprising a first polypeptide which is a lectin and a second polypeptide which is a ligand of a cell surface. . .

DETD [0196] A stable and highly bioactive designer cytokine consisting of a ***fusion*** ***protein*** between IL6 and a soluble IL6 receptor, designated H-IL6, has been used for human hematopoietic progenitor cell expansion and is. . .

DETD [0225] Bioactive murine and human IL12 ***fusion*** ***proteins*** combining the two IL12 subunits in a single molecule have been described. This designer cytokine retains antitumor activity in vivo.. . .

DETD . . . viral antigens such as hemagglutinin and neuraminidase and other influenza viral components; measles viral antigens such as the

measles virus ***fusion*** ***protein*** and other measles virus components; rubella viral antigens such as proteins E1 and E2 and other rubella virus components; rotaviral. . . cytomegaloviral antigens such as envelope glycoprotein B and other cytomegaloviral antigen components; respiratory syncytial viral antigens such as the RSV ***fusion*** ***protein*** , the M2 protein and other respiratory syncytial viral antigen components; herpes simplex viral antigens such as immediate early proteins, glycoprotein. . .

DETD . . . to the manufacturer's instructions. The purified HA1 DNA fragment was digested with Nhe I and Kpn I. To make the ***fusion*** ***protein*** , the purified Nhe 1-Kpn I HA fragment was ligated into the pUC 19 GM-CSF-K-Gas1.1 vector that had been digested with. . .

DETD [5836] Homo sapiens LDLR-FUT ***fusion*** ***protein*** (LDLR-FUT) mRNA, complete cds

DETD [5968] Homo sapiens partial mRNA for BCR/FGFR1 chimaeric ***fusion*** ***protein***

DETD [7849] Homo sapiens translocation associated ***fusion*** ***protein*** IRTA1/IGA1 (IRTA1/IGHA1) mRNA, complete cds

DETD [11789] Homo sapiens tumor necrosis factor receptor superfamily, member 12 (***translocating*** chain-association membrane protein) (TNFRSF12), mRNA

DETD [14874] Homo sapiens neurotrophic receptor tyrosine kinase-ETS related protein ***fusion*** ***protein*** (NTRK3-ETV6 fusion) mRNA, partial cds

DETD [14877] Homo sapiens ETS related protein-neurotrophic receptor tyrosine kinase ***fusion*** ***protein*** (ETV6-NTRK3 fusion) mRNA, partial cds

DETD [16811] 11503: AF101784

[16812] Homo sapiens b-TRCP variant E3RS- ***IkappaB*** mRNA, partial cds

L6 ANSWER 4 OF 10 USPATFULL on STN

AN 2004:165307 USPATFULL

TI Lectin compositions and methods for modulating an immune response to an antigen

IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES

PA Genitrix, LLC (U.S. corporation)

PI US 2004126793 A1 20040701

AI US 2003-666885 A1 20030919 (10)

RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING

PRAI US 2002-404823P 20020820 (60)
US 2003-487407P 20030715 (60)

DT Utility

FS APPLICATION

LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199

CLMN Number of Claims: 147

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 28979

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

SUMM [0097] The present invention is based, in part, on the discovery that a

multifunctional ***fusion*** ***protein*** comprising a first polypeptide which is a lectin and a second polypeptide which is a ligand of a cell surface. . .

SUMM [0196] A stable and highly bioactive designer cytokine consisting of a ***fusion*** ***protein*** between IL6 and a soluble IL6 receptor, designated H-IL6, has been used for human hematopoietic progenitor cell expansion and is. . .

SUMM [0225] Bioactive murine and human IL12 ***fusion*** ***proteins*** combining the two IL12 subunits in a single molecule have been described. This designer cytokine retains antitumor activity in vivo.. . .

SUMM . . . viral antigens such as hemagglutinin and neuraminidase and other influenza viral components; measles viral antigens such as the measles virus ***fusion*** ***protein*** and other measles virus components; rubella viral antigens such as proteins E1 and E2 and other rubella virus components; rotaviral. . . cytomegaloviral antigens such as envelope glycoprotein B and other cytomegaloviral antigen components; respiratory syncytial viral antigens such as the RSV ***fusion*** ***protein*** , the M2 protein and other respiratory syncytial viral antigen components; herpes simplex viral antigens such as immediate early proteins, glycoprotein. . .

DETD . . . to the manufacturer's instructions. The purified HA1 DNA fragment was digested with Nhe I and Kpn I. To make the ***fusion*** ***protein*** , the purified Nhe I-Kpn I HA fragment was ligated into the pUC19 GM-CSF-K-Gas1.1 vector that had been digested with Nhe. . .

DETD [2485] 2404: AF117899 Homo sapiens LDLR-FUT ***fusion*** ***protein*** (LDLR-FUT) mRNA, complete cds gi|6739499|gb|AF117899.1|AF117899[6739499]

DETD [2527] 2457: AJ298916 Homo sapiens partial mRNA for BCR/FGFR1 chimaeric ***fusion*** ***protein*** gi|16444911|emb|AJ298916.1|HSA298916[16444911]

DETD [3126] 4842: AF343666 Homo sapiens translocation associated ***fusion*** ***protein*** IRTA1/IGA1 (IRTA1/IGHA1) mRNA, complete cds gi|13591717|gb|AF343666.1|AF343666[13591717]

DETD [4398] 6991: NM.sub.--003790 Homo sapiens tumor necrosis factor receptor superfamily, member 12 (***translocating*** chain-association membrane protein) (TNFRSF12), mRNA gi|4507568|ref|NM.sub.--003790.1|[4507568]

DETD [5031] 8873: AF041811 Homo sapiens ETS related protein-growth factor receptor tyrosine kinase ***fusion*** ***proteins*** (ETV6-NTRK3 fusion) mRNA, partial cds gi|6274523|gb|AF041811.2|AF041811[6274523]

DETD [5407] 9538: AF125809 Homo sapiens neurotrophic receptor tyrosine kinase-ETS related protein ***fusion*** ***protein*** (NTRK3-ETV6 fusion) mRNA, partial cds gi|6635288|gb|AF125809.1|AF125809[6635288]

DETD [5408] 9539: AF125808 Homo sapiens ETS related protein-neurotrophic receptor tyrosine kinase ***fusion*** ***protein*** (ETV6-NTRK3 fusion) mRNA, partial cds gi|6635286|gb|AF125808.1|AF125808[6635286]

DETD [6035] 11503: AF101784 Homo sapiens b-TRCP variant E3RS- ***IkappaB*** mRNA, partial cds gi|4165135|gb|AF101784.1|AF101784[4165135]

L6 ANSWER 5 OF 10 USPATFULL on STN

AN 2004:164872 USPATFULL

TI Lectin compositions and methods for modulating an immune response to an antigen

IN Segal, Andrew H., Boston, MA, UNITED STATES
Young, Elihu, Sharon, MA, UNITED STATES

PA Genitrix, LLC (U.S. corporation)

PI US 2004126357 A1 20040701

AI US 2003-666886 A1 20030919 (10)

RLI Division of Ser. No. US 2003-645000, filed on 20 Aug 2003, PENDING

PRAI US 2002-404823P 20020820 (60)
US 2003-487407P 20030715 (60)

DT Utility

FS APPLICATION

LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 39007

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and serve as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The present invention further relates to a method of modulating an immune response in an animal using such compositions.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

SUMM . . . an animal comprising administering to said animal a composition comprising a cell comprising an antigen, said composition further comprising a ***fusion*** ***protein*** comprising a lectin and a ligand for a cell surface protein.

DETD DETAILED DESCRIPTION

[0097] The present invention is based, in part, on the discovery that a multifunctional ***fusion*** ***protein*** comprising a first polypeptide which is a lectin and a second polypeptide which is a ligand of a cell surface. . .

DETD [0196] A stable and highly bioactive designer cytokine consisting of a ***fusion*** ***protein*** between IL6 and a soluble IL6 receptor, designated H-IL6, has been used for human hematopoietic progenitor cell expansion and is. . .

DETD [0225] Bioactive murine and human IL12 ***fusion*** ***proteins*** combining the two IL12 subunits in a single molecule have been described. This designer cytokine retains antitumor activity in vivo.. . .

DETD . . . viral antigens such as hemagglutinin and neuraminidase and other influenza viral components; measles viral antigens such as the measles virus ***fusion*** ***protein*** and other measles virus components; rubella viral antigens such as proteins E1 and E2 and other rubella virus components; rotaviral. . . cytomegaloviral antigens such as envelope glycoprotein B and other cytomegaloviral antigen components; respiratory syncytial viral antigens such as the RSV ***fusion*** ***protein*** , the M2 protein and other respiratory syncytial viral antigen components; herpes simplex viral antigens such as immediate early proteins, glycoprotein. . .

DETD . . . to the manufacturer's instructions. The purified HA1 DNA fragment was digested with Nhe I and Kpn I. To make the ***fusion*** ***protein*** , the purified Nhe 1-Kpn I HA fragment was ligated into the pUC 19 GM-CSF-K-Gas1.1 vector that had been digested with. . .

DETD [5805] Homo sapiens LDLR-FUT ***fusion*** ***protein*** (LDLR-FUT) mRNA, complete cds

DETD [5937] Homo sapiens partial mRNA for BCR/FGFR1 chimaeric ***fusion*** ***protein***

DETD [7818] Homo sapiens translocation associated ***fusion*** ***protein*** IRTA1/IGA1 (IRTA1/IGHA1) mRNA, complete cds

DETD [11758] Homo sapiens tumor necrosis factor receptor superfamily, member 12 (***translocating*** chain-association membrane protein) (TNFRSF12), mRNA

DETD [14843] Homo sapiens neurotrophic receptor tyrosine kinase-ETS related protein ***fusion*** ***protein*** (NTRK3-ETV6 fusion) mRNA, partial cds

DETD [14846] Homo sapiens ETS related protein-neurotrophic receptor tyrosine kinase ***fusion*** ***protein*** (ETV6-NTRK3 fusion) mRNA, partial cds

DETD [16780] 11503: AF101784

[16781] Homo sapiens b-TRCP variant E3RS- ***IkappaB*** mRNA, partial cds

L6 ANSWER 6 OF 10 USPATFULL on STN

AN 2004:12959 USPATFULL

TI Methods and compositions for diagnosing or monitoring auto immune and chronic inflammatory diseases

IN Wohlgemuth, Jay, Palo Alto, CA, UNITED STATES

Fry, Kirk, Palo Alto, CA, UNITED STATES
Woodward, Robert, Pleasanton, CA, UNITED STATES
Ly, Ngoc, San Bruno, CA, UNITED STATES
PI US 2004009479 A1 20040115
AI US 2002-131827 A1 20020424 (10)
RLI Continuation-in-part of Ser. No. US 2001-6290, filed on 22 Oct 2001, PENDING
PRAI US 2001-296764P 20010608 (60)
DT Utility
FS APPLICATION
LREP Michael R. Ward, Morrison & Foerster LLP, 425 Market Street, San Francisco, CA, 94105-2482
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 19677
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of diagnosing or monitoring an autoimmune or chronic inflammatory disease, particularly SLE in a patient by detecting the expression level of one or more genes or surrogates derived therefrom in the patient are described. Diagnostic oligonucleotides for diagnosing or monitoring chronic inflammatory disease, particularly SLE infection and kits or systems containing the same are also described.
DETD . . . to produce the protein encoded by the novel nucleotide sequence for such assay systems, it may be advantageous to engineer ***fusion*** ***proteins*** that can facilitate labeling, immobilization and/or detection.
DETD . . . Hs.129780 SWAP70
Hs.153026
TNFRSF10d Hs.129844 DOM-3 (C. elegans)
homolog Z Hs.153299
POLL Hs.129903
Hs.153551
GADD153 = growth arrest and DNA-damage Hs.129913
Hs.15370
inducible gene/fus-chop ***fusion*** ***protein***
solute carrier family 5 (neutral amino acid Hs.130101 SMAD6
Hs.153863
transporters, system A), member 4
Hs.130232 APEXL2
Hs.154149
Hs.13034
Hs.154198
CD30L Hs.1313
Hs.154366
SCYA26. . .
DETD . . . 1130 1630 X52882 Hs.4112 0 6
polypeptide 1 gene/cds = (21,1691)/
gb = X528
176A7 515 892 BC000687 Hs.4147 0 1
translocating chain-associating membrane p
185B5 3480 3707 AB023216 Hs.4278 1.00E-86 1
mRNA for KIAA0999 protein, partial cds/cds = (0
154E12 1731 2531 AF079566. . .
DETD . . . = (53,2296)/gb =
122E5 1060 1294 NM_002893 Hs.31314 1.00E-113 1
retinoblastoma-binding protein 7 (RBBP7), mR
117B1 2056 2489 AF153419 Hs.31323 0 1
IkappaBkinase complex-associated protein (I
462E10 337 569 AV752358 Hs.31409 1.00E-108 1
AV752358 cDNA, 5' end/clone = NPDBHG03/clone.sub.--
126E7 1962 2748 AB014548 Hs.31921 0. . .
DETD . . . 324 682 BE540238 Hs.180549 1.00E-143 1
601059809F1 cDNA, 5' end/clone = IMAGE: 3446283
68G8 1447 3594 AF123094 Hs.180566 0 3
API2-MLT ***fusion*** ***protein*** (API2-MLT) mRNA, comp
180B9 1851 2142 NM_002087 Hs.180577 1.00E-160 2
granulin (GRN), mRNA/cds = (62,1843)/gb = NM_00
51E4 880 2466 NM_005066 Hs.180610. . .

L6 ANSWER 7 OF 10 USPATFULL on STN

AN 2003:220740 USPATFULL
TI Methods and compositions for diagnosing and treating rheumatoid arthritis
IN Pittman, Debra D., Windham, NH, UNITED STATES
Feldman, Jeffrey L., Arlington, MA, UNITED STATES
Shields, Kathleen M., Harvard, MA, UNITED STATES
Trepicchio, William L., Andover, MA, UNITED STATES
PI US 2003154032 A1 20030814
AI US 2001-23451 A1 20011217 (10)
PRAI US 2000-255861P 20001215 (60)
DT Utility
FS APPLICATION
LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25385
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.
SUMM . . . a protein or other variety (e.g. lactose to convert the env protein to an asialoglycoprotein), as well as by generating ***fusion*** ***proteins*** (e.g. single-chain antibody/env ***fusion*** ***proteins***). This technique, while useful to limit or otherwise direct the infection to certain tissue types, and can also be used. . .
SUMM . . . any vessel suitable for containing the reactants. Examples include microtitre plates, test tubes, and micro-centrifuge tubes. In one embodiment, a ***fusion*** ***protein*** can be provided which adds a domain that allows the protein to be bound to a matrix. For example, glutathione-S-transferase/polypeptide (GST/polypeptide) ***fusion*** ***proteins*** can be adsorbed onto glutathione sepharose beads (Sigma Chemical, St. Louis, Mo.) or glutathione derivatized microtitre plates, which are then. . .
SUMM . . . intrinsic or extrinsic activity. In the instance of the latter, the enzyme can be chemically conjugated or provided as a ***fusion*** ***protein*** with the binding partner. To illustrate, the binding partner can be chemically cross-linked or genetically fused with horseradish peroxidase, and. . . in the complex can be assessed with a chromogenic substrate of the enzyme, e.g. 3,3'-diamino-benzadine terahydrochloride or 4-chloro-1-napthol. Likewise, a ***fusion*** ***protein*** comprising the polypeptide and glutathione-S-transferase can be provided, and complex formation quantitated by detecting the GST activity using 1-chloro-2,4-dinitrobenzene (Habig. . .
SUMM . . . be used. Alternatively, the protein to be detected in the complex can be "epitope tagged" in the form of a ***fusion*** ***protein*** which includes, in addition to the polypeptide sequence, a second polypeptide for which antibodies are readily available (e.g. from commercial sources). For instance, the GST ***fusion*** ***proteins*** described above can also be used for quantification of binding using antibodies against the GST moiety. Other useful epitope tags. . .
DETD . . . protein S2 ribosomal protein S2
UBA52_rna1 X56997_rna1 X56997 PASS 9 268.44 PASS
13 9 198.08 1.36 1.36 UbA52
ubiquitin-52 amino acid

fusion ***protein***
RPS18 X69150_at X69150 PASS 9 377.78 PASS
13 9 278.77 1.36 1.36 PRS18 6p21.3
ribosomal protein S18

FCER2 M15059_at M15059 PASS 9. . .
DETD . . . KIAA0151 D63485 6 Pass 14.33 1 63
13 Pass TRUE FALSE FALSE 6.69 2.14
IKK-related kinase 1 Kinase

epsilon, inducible ***IkappaB***

kinase, IKKE
39044_s_at DGKD D73409 6 Pass 31.67 7 76
13 Pass TRUE FALSE FALSE 14 77 2.14
diacylglycerol kinase, delta. . .
DETD . . . 11 50 4 18 13 Pass TRUE FALSE
FALSE 5.15 2.23 tumor necrosis factor 1p36 2

receptor superfamily,

member 12 (***translocating***

chain-association

membrane protein):
38432_at ISG15 AA203213 6 Pass 16 50 13.82
10 Pass TRUE FALSE FALSE 7.40 2.23
interferon-stimulated 1

protein,. . .

L6 ANSWER 8 OF 10 USPATFULL on STN
AN 2003:99724 USPATFULL
TI Proteins and druggable regions of proteins
IN Edwards, Aled, Toronto, CANADA
Arrowsmith, Cheryl, North York, CANADA
Greenblatt, Jack, Toronto, CANADA
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DT Utility
FS APPLICATION
LREP FOLEY HOAG LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BOULEVARD, BOSTON, MA, 02110-2600
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 4944
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods for learning structural information about a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to a molecule or molecular complex. The invention also provides methods for identifying a compound that binds to one molecule or molecular complex and not to one or more other molecules or molecular complexes. Other methods that are provided can be used to identify a compound that binds to at least two molecules or molecular complexes.
SUMM [0049] A " ***fusion*** ***protein*** " or "fusion polypeptide" refers to a polypeptide comprising a first amino acid sequence encoding a polypeptide linked to at least. . . not substantially homologous with any domain of the first polypeptide. The two polypeptide sequences may be linked in frame. A ***fusion*** ***protein*** may include a domain which is found (albeit in a different protein) in an organism which also expresses the first. . . fusion polypeptides may be fused to the N-terminus, the C-terminus, or the N- and C-terminus of the first polypeptide. Exemplary ***fusion*** ***proteins*** include polypeptides comprising a glutathione S-transferase tag (GST-tag), histidine tag (His-tag), an immunoglobulin domain or an immunoglobulin binding domain.
SUMM . . . synthesizer or by recombinant techniques or combinations thereof), a recombinant test compound, a natural or a non-natural test compound, a ***fusion*** ***protein*** or equivalent thereof and mutants, derivatives or combinations thereof.
SUMM [0135] In certain embodiments, a polypeptide which may be used in

accordance with the methods of the invention is a ***fusion*** ***protein*** containing a domain which increases it solubility and/or facilitates its purification, identification, detection, and/or structural or functional characterization. Exemplary domains,. . . protein A, protein G, calmodulin-binding peptide, thioredoxin, maltose binding protein, HA, myc, poly arginine, poly His, poly His-Asp or FLAG ***fusion*** ***proteins*** and tags. Additional exemplary domains include domains that alter protein localization in vivo, such as signal peptides, type III secretion. . . the invention to include linker sequences between the polypeptide and the fusion domain in order to facilitate construction of the ***fusion*** ***protein*** or to optimize protein expression or structural constraints of the ***fusion*** ***protein*** . In another embodiment, the polypeptide may be constructed so as to contain protease cleavage sites between the fusion polypeptide and. . .

SUMM . . . Chem 269:10444-10450; and Perez et al. (1992) J Cell Sci 102:717-722). The transcytosis polypeptide may also be a non-naturally occurring membrane- ***translocating*** sequence (MTS), such as the peptide sequences disclosed in U.S. Pat. No. 6,248,558.

SUMM . . . of the invention may be tested for binding activity, as well as inhibitory ability, by expression as, for example, thioredoxin ***fusion*** ***proteins*** , each of which contains a discrete fragment of a protein of the invention (see, for example, U.S. Pat. Nos. 5,270,181. . . .

SUMM . . . that the degenerate set of potential nucleotide sequences are expressible as individual polypeptides, or alternatively, as a set of larger ***fusion*** ***proteins*** (e.g. for phage display).

SUMM . . . et al., WO 88/06630; Fuchs et al., (1991) Bio/Technology 9:1370-1371; and Goward et al., (1992) TIBS 18:136-140), and the resulting ***fusion*** ***protein*** detected by panning, e.g. using a fluorescently labeled molecule which binds the cell surface protein, e.g. FITC-substrate, to score for. . .

SUMM [0157] In similar fashion, the gene library may be expressed as a ***fusion*** ***protein*** on the surface of a viral particle. For instance, in the filamentous phage system, foreign peptide sequences may be expressed. . . used in phage display libraries, as either of the phage gIII or gVIII coat proteins may be used to generate ***fusion*** ***proteins*** without disrupting the ultimate packaging of the viral particle (Ladner et al., PCT publication WO 90/02909; Garrard et al., PCT. . .

SUMM . . . construct which includes coding sequences for a late vaccinia virus structural protein to produce a set of recombinant viruses expressing ***fusion*** ***proteins*** comprising a portion of the protein as part of the virion. The Hepatitis B surface antigen may also be utilized in this role as well. Similarly, chimeric constructs coding for ***fusion*** ***proteins*** containing a portion of a polypeptide and the poliovirus capsid protein may be created to enhance immunogenicity (see, for example,. . .

SUMM . . . cleavage site sequence at the N-terminus of the desired portion of the recombinant protein, may allow purification of the expressed ***fusion*** ***protein*** by affinity chromatography using a Ni.sup.2+ metal resin. The purification leader sequence may then be subsequently removed by treatment with. . .

DETD . . . GRK-7 AF282269
receptor kinases
(GRKs)
Hexokinase cancer type II
NM_000189
Casein Kinase
Glycogen
Synthase Kinase
(GSK),
LIM Kinase
(actin-binding
kinase
IkappaB
Kinases (IKK),
Rock and Related
Rho Interacting
Proteins (protein
kinases)

Pyruvate
Dehydrogenase
Kinase (PDK)
IL-1 receptor
kinases
Calcium/calmodu
lin-dependent
protein. . .

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